Volume 86 □ Number 1 □ January 2000

Federal Reserve BULLETIN

Board of Governors of the Federal Reserve System, Washington, D.C.

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The *Federal Reserve Bulletin* is issued monthly under the direction of the staff publications committee. This committee is responsible for opinions expressed except in official statements and signed articles. It is assisted by the Economic Editing Section headed by S. Ellen Dykes, the Multimedia Technologies Center under the direction of Christine S. Griffith, and Publications Services supervised by Linda C. Kyles.

Recent Changes in U.S. Family Finances: Results from the 1998 Survey of Consumer Finances

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Using data from the Federal Reserve Board's two most recent Surveys of Consumer Finances, this article provides a detailed picture of changes in the financial condition of U.S. families between 1995 and 1998. The discussion also refers to selected data from the two preceding surveys to provide a broader context within which to interpret the more recent changes.[1]

The financial situation of families changed notably between 1995 and 1998. While income continued a moderate upward trend, net worth grew strongly, and the increase in net worth was broadly shared by different demographic groups. A continued rise in the holding of stock equity combined with a booming stock market accounts for a substantial part of the rise in net worth. The 3.5 percentage point decline in the proportion of families without some type of transaction account—a group that tends to have low incomes—suggests that improvements in financial circumstances were also shared by many people who did not own stocks. The indebtedness of families grew, but less rapidly than their assets. Nonetheless, compared with 1995, debt repayments in 1998 accounted for a larger share of the income of the typical family with debt, and the proportion of debtors who were late with their payments by sixty days or more in the year preceding the survey was also higher.

BACKGROUND

In 1998, the U.S. economy entered the seventh year of an economic expansion. The civilian unemployment rate had fallen from 5.7 percent in September 1995 to 4.5 percent in September 1998. At the same time, inflation remained subdued, with the consumer price index rising at an average annual rate of 2.2 percent over the period.[2]

Interest rates on deposits remained fairly steady. Mortgage rates fluctuated over the period but declined overall, from 7.4 percent in 1995 to 6.9 percent in 1998. Over the same period, key asset prices rose markedly. Standard and Poor's index of 500 stock prices registered an extraordinary gain of 76 percent, and the median price of existing homes sold rose 15 percent, to $129,400.

Institutional, regulatory, and market changes during this time altered the context in which families planned their finances. Employers continued to expand offerings of tax-deferred retirement accounts for their workers; new means of stock trading emerged, such as Internet-based brokerage services; automobile dealers added less-expensive models to the range of vehicles available for leasing; lenders became increasingly willing to accept mortgages with very low down payments; and many banks faced increased regulatory pressure to provide equitable access to credit.[3]

Ongoing demographic trends continued to change the structure of the population. Overall population growth was about 2.8 percent between 1995 and 1998. With the aging of the "baby boom" population, the number of people aged 45 to 64 grew about 9.5 percent. The population in some other age groups grew less, and the number of children aged less than 5 declined slightly. The number of households rose

1. The four surveys were conducted in 1989, 1992, 1995, and 1998. For a detailed discussion of results from earlier surveys, see Arthur B. Kennickell and Martha Starr-McCluer, "Changes in Family Finances from 1989 to 1992: Evidence from the Survey of Consumer Finances," *Federal Reserve Bulletin,* vol. 80 (October 1994), pp. 861–82; and Arthur B. Kennickell, Martha Starr-McCluer, and Annika E. Sundén, "Family Finances in the U.S.: Recent Evidence from the Survey of Consumer Finances," *Federal Reserve Bulletin,* vol. 83 (January 1997), pp. 1–24. Tabulations of data from the four surveys will be available on the Internet at www.federalreserve.gov/pubs/oss/oss2/98/scf98home.html.

2. All aggregate statistics cited in this section are for September except as noted; September is the midpoint of the period during which interviews were conducted.

3. For an examination of the wider availability of mortgage credit over this period, see Glenn B. Canner, Wayne Passmore, and Elizabeth Laderman, "The Role of Specialized Lenders in Extending Mortgages to Lower-Income and Minority Households," *Federal Reserve Bulletin,* vol. 85 (November 1999), pp. 709–23.

3.5 percent, while the average number of people per household declined somewhat.

Family Income

To measure income, the survey requests information on families' total cash income, before taxes, for the full calendar year preceding the interview (see box "The Survey of Consumer Finances"). In the 1998 survey, inflation-adjusted mean and median family incomes continued the upward trend observed between the 1992 and 1995 surveys; they also surpassed the levels observed in the 1989 survey, toward the end of the previous economic expansion (table 1). Overall, trends in mean and median income shown in the four surveys accord well with those shown in the Current Population Survey (CPS) of the Bureau of the Census.

From 1995 to 1998, the proportion of families with incomes of $50,000 or more rose about one-fifth, to 33.8 percent, while the proportion with incomes below $10,000 fell about one-sixth, to 12.6 percent.

Some cross-sectional patterns hold consistently in the survey data since 1989. Median income is successively higher for each age group through 45–54 and

The Survey of Consumer Finances

The Survey of Consumer Finances (SCF) is a triennial survey of U.S. families sponsored by the Board of Governors of the Federal Reserve System with the cooperation of the U.S. Department of the Treasury. The term "family" as it is used here is more comparable to the U.S. Bureau of the Census definition of "household" than to their use of "family," which excludes the possibility of a family of one individual. The appendix to this article provides a full technical definition of "family" for the SCF. The survey is designed to provide detailed information on U.S. families' balance sheets and their use of financial services, as well as on their pensions, labor force participation, and demographic characteristics as of the time of the interview. It also collects information on families' total cash income, before taxes, for the calendar year preceding the survey. Because only minor changes have been made in the wording of the questionnaire since 1989, the underlying measurements are highly comparable over time.

The need to measure financial characteristics imposes special requirements on the sample design for the survey. The survey is expected to provide reliable information both on attributes that are broadly distributed in the population—for example, home ownership—and on those that are highly concentrated in a relatively small part of the population—for example, ownership of closely held businesses. To address this requirement, the SCF employs a dual-frame sample design consisting of both a standard, geographically based random sample and a special oversample of relatively wealthy families. This design has been essentially unchanged since 1989. Weights are used to combine information from the two samples to make estimates for the full population. Recent modifications to the survey weights, which are described in the appendix, have enhanced the comparability of the time series of survey estimates.

This article draws principally upon the final data from the 1995 survey and nearly final data from the 1998 survey. To provide a larger context, some information is also included from the final versions of the 1989 and 1992 surveys. Differences between estimates from earlier surveys as reported here and as reported in earlier *Federal Reserve Bulletin* articles are attributable to additional statistical processing of the data, to revisions of the weights, and to adjustments for inflation. Since 1992, the SCF has been conducted by the National Opinion Research Center at the University of Chicago (NORC) between July and December of each survey year. The 1989 SCF was conducted by the Survey Research Center at the University of Michigan. In the 1995 survey, 4,299 families were interviewed, and in the 1998 survey, 4,309 were interviewed.

All dollar figures from the SCF in this article are adjusted to 1998 dollars using the "current methods" version of the consumer price index (CPI) for all urban consumers.[1] In an ongoing effort to improve accuracy, the Bureau of Labor Statistics has introduced a number of revisions to the CPI methodology. The current-methods index attempts to extend these changes to earlier years to obtain a series as consistent as possible with the current practices in the official CPI. Because the current-methods index shows a lower rate of past price inflation than does the official CPI, upward adjustments for inflation made to the pre-1998 nominal values are smaller than they would have been under the official CPI.

To provide a measure of the significance of the developments discussed in this article, standard errors due to sampling are given for selected estimates. Space limits prevented the inclusion of the standard errors for all estimates. Although we do not directly address the statistical significance of the results, the article highlights findings that are significant or are interesting in a broader context.

1. For technical information about the construction of this index, see Kenneth J. Stewart and Stephen B. Reed, "Consumer Price Index Research Series Using Current Methods, 1978–98," *Monthly Labor Review*, vol. 122 (June 1999), pp. 29–38. To adjust assets and liabilities to 1998 dollars, the following factors were applied to the earlier survey figures: for 1989, 1.2733; for 1992, 1.1417; and for 1995, 1.0622. To adjust family income for the previous calendar year to 1998 dollars, the following factors were applied: for 1989, 1.3285; for 1992, 1.1697; for 1995, 1.0904; and for 1998, 1.0135.

then declines. Mean income has a similar pattern, but the age group at which it reaches its peak varies somewhat across survey years. In part because income in the survey includes returns on assets, mean and median incomes increase steadily with net worth. Education is also positively associated with income in the surveys.

Income by Demographic Category

Between 1995 and 1998, mean inflation-adjusted family income either held steady or rose for all age groups. The percentage increases were particularly strong for families headed by those in the 55-to-74 age groups. Median income, which is the income of the "typical" family, showed a similar pattern, but it also grew substantially for the 45-to-54 age group.

Across education groups, mean income grew between 1995 and 1998 only for families headed by individuals with at least some college education. However, mean incomes for all education groups in 1998 were lower than they had been in 1989.[4] This broad decrease in the face of the rise in the overall mean since 1989 is explained, at least in part, by a large gain in the proportion of all families headed by those with a college degree or at least some college education; these two groups have the highest means. Indeed, median income between 1989 and 1998 rose appreciably only for families headed by college graduates. Between 1995 and 1998, median income grew for all families except those whose head had not completed a high school degree.

Mean and median income rose between 1995 and 1998 both for families with white non-Hispanic respondents and for all other families, but over the 1989 to 1998 interval these measures increased only for the latter group. At the same time, the data show increases in the proportions of respondents reporting that they were white non-Hispanic.[5] The change is largely explained by a decrease in the fraction of respondents reporting themselves as "Hispanic" in the SCF.

Families headed by the self-employed showed the strongest gains in mean and median income of all the work-status groups over the 1995 to 1998 period. At the same time, mean income rose in all regions of the country, although the median fell slightly for families in the north central region. Mean income increased over this time for all the net worth groups shown in the table, but the median increased markedly only for families in the top half of the net worth distribution.

Family Saving

Because saving out of current income is an important determinant of changes in family net worth, the 1992 and later surveys have asked respondents whether, over the preceding year, the family spent less than its income, more than its income, or about as much as its income.[6] Though only qualitative, these answers provide a useful indicator of whether families are saving. Asking instead for a specific dollar amount of spending or saving would require substantial additional time from respondents and might lower the rate of response to the survey.

Overall, the proportion of families reporting that they saved in the preceding year rose only slightly between 1995 and 1998 and was still below the level in 1992, near the outset of the current expansion. Between the two most recent surveys, large declines in the saving measure for the youngest and oldest groups were offset by increases for most of the other age groups. Across net worth groups, the measure increased most for the groups with net worth between the 50th and 90th percentiles of the net worth distribution, and it decreased most for the top decile.

The upward movement in the SCF saving indicator contrasts with household saving as measured in the national income and product accounts (NIPA), which declined between 1995 and 1998. However, there are

4. Data from the CPS give a similar result for the 1989–98 period.

5. The SCF question that is used to determine race and Hispanic origin was changed in 1998. In earlier surveys, respondents were asked to choose a single category that described their race or ethnicity best. In 1998, respondents were allowed to choose as many as seven responses, but they were asked to report first the category with which they identified most strongly.

For comparability with the earlier surveys, this article uses only the first 1998 response. Very few respondents gave more than a single response, and more complex treatments of the data do not yield conclusions that are substantively different from those reported in this article.

The proportion of respondents reporting Hispanic origin differs from estimates based on the CPS, most likely because the CPS asks directly about ethnicity in a question separate from the one that asks about race. Thus, in the CPS, even respondents who do not normally identify themselves as Hispanic might provide an ethnic origin that is later classified as Hispanic. The 1998 SCF estimates of the proportion of African-Americans and other minorities are close to CPS estimates.

6. For a more detailed discussion of this variable, see Arthur B. Kennickell, *Saving and Permanent Income,* Finance and Economics Discussion Series 95–41 (Board of Governors of the Federal Reserve System, November 1995). Available at www.federalreserve.gov/pubs/oss/oss2/method.html.

1. Before-tax family income, and distribution of families, by selected characteristics of families, 1989, 1992, 1995, and 1998 surveys, and percentage of families who saved, 1992, 1995, and 1998 surveys

Thousands of 1998 dollars except as noted

Family characteristic	1989			1992			
	Median	Mean	Percentage of families	Median	Mean	Percentage of families who saved	Percentage of families
All families	**32.8** (1.3)	**51.7** (3.6)	**100.0**	**30.4** (.7)	**45.6** (1.1)	**57.1**	**100.0**
Income (1998 dollars)							
Less than 10,000	6.6	6.3	15.1	6.5	6.2	27.9	14.8
10,000–24,999	16.5	16.9	23.9	17.5	17.2	47.8	27.0
25,000–49,999	35.9	36.2	29.7	36.3	36.7	63.3	29.8
50,000–99,999	66.4	68.9	22.7	65.7	68.8	71.4	20.7
100,000 or more	144.8	235.0	8.6	140.4	195.5	83.3	7.6
Age of head (years)							
Less than 35	26.6	35.5	28.1	28.1	34.6	59.1	25.8
35–44	46.5	62.9	21.5	40.9	53.2	56.9	22.8
45–54	49.2	76.8	15.1	47.6	64.7	59.0	16.2
55–64	33.6	60.7	13.9	33.9	56.5	59.2	13.2
65–74	20.6	42.2	12.5	20.4	33.0	54.0	12.6
75 or more	17.6	32.2	8.9	15.7	26.6	49.4	9.4
Education of head							
No high school diploma	17.3	24.8	24.3	14.0	19.9	38.1	20.4
High school diploma	28.8	38.1	32.2	27.2	34.3	56.8	30.0
Some college	37.2	51.8	15.7	31.6	42.2	59.5	17.8
College degree	53.1	90.7	27.8	51.5	74.7	68.1	31.9
Race or ethnicity of respondent							
White non-Hispanic	38.5	59.2	74.8	35.1	50.4	61.1	75.3
Nonwhite or Hispanic	18.6	29.3	25.2	21.1	31.1	44.9	24.7
Current work status of head							
Working for someone else	40.9	52.2	57.0	39.3	50.0	63.2	54.8
Self-employed	47.8	117.6	11.1	51.2	86.8	59.4	10.9
Retired	18.5	30.3	25.2	17.3	26.1	48.2	26.0
Other not working	9.3	17.9	6.7	12.9	23.9	41.3	8.3
Region							
Northeast	37.2	59.3	20.8	37.9	52.8	57.5	20.2
North central	31.8	53.9	24.4	33.0	47.1	61.3	24.4
South	27.9	44.1	34.4	26.9	38.8	54.2	34.6
West	38.5	54.0	20.4	30.2	48.4	56.4	20.9
Housing status							
Owner	42.5	65.0	63.9	39.8	55.9	63.2	63.9
Renter or other	17.5	28.0	36.1	19.5	27.5	46.2	36.1
Percentiles of net worth							
Less than 25	13.3	18.6	25.0	14.9	19.8	37.4	25.0
25–49.9	28.0	32.0	25.0	27.8	31.5	52.4	25.0
50–74.9	40.2	46.0	25.0	37.4	41.7	63.5	25.0
75–89.9	53.1	64.7	15.0	49.1	58.0	70.8	15.0
90–100	99.6	178.0	10.0	92.3	137.0	81.0	10.0

some important conceptual differences between the two measures. First, the underlying SCF question asks only whether the family has spent more, less, or about the same as its income over the past year. Thus, the *amounts* by which families' expenditures differed from their income might have changed appreciably but without necessarily altering the outcome of the SCF variable. Second, the NIPA measure of saving relies on definitions of income and consumption that may not be the same as those used by individual families. Notably, the NIPA measure excludes saving in the form of capital gains, whereas families might include such gains when reporting their saving in the SCF; hence, a strongly rising stock market could well have caused the SCF saving indicator to suggest more saving than the NIPA.

The survey also collects information on motivations for saving (table 2).[7] Several trends appear in the data: Retirement-related reasons for saving have consistently increased in importance since 1989. This result is not surprising given the increased public

7. Although families were asked to report their motives for saving regardless of whether they were currently saving, some families reported only that they do not save. The analysis here is confined to the first reason reported by families that provided a motive. The proportion of families reporting only that they do not save declined almost 2 percentage points from 1995 to 1998.

1.—Continued

Thousands of 1998 dollars except as noted

Family characteristic	1995				1998			
	Median	Mean	Percentage of families who saved	Percentage of families	Median	Mean	Percentage of families who saved	Percentage of families
All families	**32.7** (.9)	**47.5** (1.1)	**55.2**	**100.0**	**33.4** (1.0)	**53.1** (1.6)	**55.9**	**100.0**
Income (1998 dollars)								
Less than 10,000	6.2	5.6	31.2	15.1	6.2	5.6	30.7	12.6
10,000–24,999	17.9	17.4	41.4	25.4	16.9	17.1	40.2	24.8
25,000–49,999	36.8	36.7	60.4	31.0	35.5	35.9	58.9	28.8
50,000–99,999	67.6	69.3	70.4	21.0	66.0	68.8	71.8	25.2
100,000 and more	147.9	218.9	86.5	7.4	142.4	239.5	81.6	8.6
Age of head (years)								
Less than 35	27.3	33.2	56.4	24.8	27.4	36.1	53.0	23.3
35–44	40.8	51.9	54.3	23.0	42.1	60.0	57.3	23.3
45–54	42.9	70.3	58.0	17.9	50.7	69.7	57.8	19.2
55–64	36.0	57.3	58.0	12.5	38.5	71.7	61.1	12.8
65–74	20.5	39.8	50.0	12.0	24.3	46.6	56.3	11.2
75 or more	17.1	28.2	51.7	9.8	16.7	29.2	48.6	10.2
Education of head								
No high school diploma	15.5	22.3	42.8	18.5	15.5	21.7	39.5	16.5
High school diploma	27.7	37.2	50.6	31.7	29.2	37.0	53.7	31.9
Some college	32.7	43.2	54.1	19.0	35.5	50.8	56.7	18.5
College degree	48.7	75.9	68.2	30.7	54.7	85.5	65.6	33.2
Race or ethnicity of respondent								
White non-Hispanic	35.2	52.2	59.1	77.6	37.7	58.8	59.8	77.7
Nonwhite or Hispanic	21.1	31.1	41.7	22.4	23.3	33.5	42.1	22.3
Current work status of head								
Working for someone else	39.3	51.5	60.4	58.3	40.5	53.5	59.8	59.2
Self-employed	40.3	85.0	63.4	10.3	52.7	109.0	61.1	11.3
Retired	17.9	29.7	46.1	25.0	19.3	32.9	48.6	24.4
Other not working	12.0	19.8	30.6	6.5	11.7	21.9	33.7	5.1
Region								
Northeast	32.7	52.4	52.6	19.8	35.5	60.9	53.5	19.3
North central	33.3	48.4	59.2	23.9	32.9	48.9	58.3	23.6
South	30.2	43.9	54.6	35.1	31.6	49.4	55.0	35.7
West	33.8	47.7	54.0	21.2	36.2	56.9	56.9	21.3
Housing status								
Owner	40.3	58.8	61.3	64.7	43.7	66.6	62.2	66.2
Renter or other	19.6	26.7	44.0	35.3	20.3	26.7	43.4	33.8
Percentiles of net worth								
Less than 25	15.4	19.8	35.8	25.0	15.9	20.4	36.4	25.0
25–49.9	30.5	33.3	51.4	25.0	30.4	33.8	50.1	25.0
50–74.9	37.7	43.3	59.4	25.0	40.5	46.7	61.9	25.0
75–89.9	45.8	56.3	68.5	15.0	56.8	67.9	71.8	15.0
90–100	85.6	149.0	82.6	10.0	88.3	177.2	80.2	10.0

NOTE. In this and the following tables, percentage distributions may not sum to 100 because of rounding. Dollars have been converted to 1998 values with the current-methods consumer price index for all urban consumers (see text box "The Survey of Consumer Finances"). See appendix for details on standard errors (shown above, in parentheses in the first row of data, for the means and medians) and for definitions of family and family head.

In providing data on income, respondents were asked to base their answers on the calendar year preceding the interview. In providing data on saving, respondents were asked to base their answers on the year (that is, not specifically the calendar year) preceding the interview. The 1989 survey did not ask families whether they had saved in the preceding year.

discussion of the future of social security, the movement toward greater reliance on account-type pension plans, and the aging of the baby-boom generation. The proportion of families reporting education-related reasons for saving has also risen since 1989. This result likely reflects both the increases in the costs of education and the increasing number of children of the baby-boom generation at or near college age. Over the same period, the reporting of liquidity-related reasons (for example, "saving for a rainy day") and of investment-related reasons declined.[8]

8. The proportion of families citing "other reasons" increased strongly from 1995 to 1998, mostly because of a greater frequency of general responses about the future (for example, "saving for the future").

2. For respondents who gave a reason, distribution of reasons most important for their families' saving, 1989, 1992, 1995, and 1998 surveys

Percent

Reason	1989	1992	1995	1998
Education	9.2	10.3	11.6	11.5
For the family	3.4	3.0	2.8	4.1
Buying own home	5.3	4.5	5.5	4.6
Purchases	8.4	5.8	8.1	5.7
Retirement	20.4	22.0	25.5	34.7
Liquidity	37.5	38.5	35.4	23.2
Investments	8.7	8.7	4.6	2.1
Other	7.0	7.1	6.6	14.1
MEMO				
When asked for a reason, reported do not save	8.4	12.0	6.8	4.9

NOTE. See note to table 1.

NET WORTH

In an acceleration of a trend dating from the 1992 SCF, both mean and median net worth—the difference between families' gross assets and their liabilities—rose strongly between 1995 and 1998 (table 3).[9] Between those two years, mean net worth rose 25.7 percent, and the median rose 17.6 percent.[10] The levels of both of these measures surpassed the levels observed in 1989, toward the end of the last expansion: Compared with the 1989 figures, 1998 mean and median net worth were both nearly 20 percent higher.

Net Worth by Demographic Category

Income and net worth have a clear, positive association in each of the four surveys. As for changes between years, mean net worth declined between 1995 and 1998 for the lowest income group and increased for all other income groups; the strongest gain was for families with incomes of $100,000 or more, a group likely to have had large gains in the stock market. Extending the comparison back to 1989 also shows substantial increases in mean net worth for higher-income families, but it shows an increase of nearly one-third for the group with incomes below $10,000.

The medians for the income groups show a somewhat different pattern than the means. Median net worth increased from 1995 to 1998 for those families in the groups with incomes from $25,000 to $99,999, while slipping somewhat for the other groups. However, compared with the 1989 data, median net worth was higher in 1998 for all families except those with incomes of $100,000 or more. The divergence of the mean and median outcomes for this income group is indicative of a widening dispersion of net worth among the families in this group.

Within any of the surveys, net worth shows the classic, hump-shaped pattern across age groups that is suggested by the life-cycle theory of household saving. In contrast to the mixed changes in net worth over income groups from 1995 to 1998, the changes in means and medians across age groups tended to go in the same direction: Mean net worth rose for all groups, and the median increased for all groups except for families in the less-than-35 age group. The medians rose particularly strongly for the families in the 65-and-older groups. By 1998, mean net worth for each age group was above its 1989 level. However, for the under-55 groups, the medians of net worth were still substantially below their 1989 levels, while the medians for the top two age groups were up notably.

Education tends to be a good predictor of earning ability over the long term, and also of net worth. Recently, the differences in net worth among certain education groups have widened. Over the 1995–98 period, median net worth rose most markedly for families headed by someone with at least some college education, while it fell for families headed by those with less than a high school diploma; indeed, for the latter group, the median has fallen over the period of the four surveys. Since 1989, the gap between families whose head does not have a high school diploma and the families in the other education groups has been widening; the groups with a high school diploma or some college (but not a college degree) have gained the most.

The mean and median net worth of white non-Hispanics rose between 1995 and 1998. The mean net worth of nonwhites and Hispanics also rose, but the median leveled off after increasing steadily between 1989 and 1995. Over the full 1989–98 period, both groups showed gains in the mean and the median. Nevertheless, the net worth of families with nonwhite or Hispanic respondents remained substantially below that of other families.

Families headed by the self-employed had the highest mean and median levels of net worth in each of the surveys. The self-employed group showed the

9. The asset values reported in this article do not account for future tax liabilities. For example, a family that sold its stock would be required to pay taxes on any increase in the value of the stock.

10. Shifts of mean net worth relative to the median provide some information about changes in the concentration of net worth. But the shift alone does not reveal which net worth groups are affected (see Arthur B. Kennickell and R. Louise Woodburn, "Consistent Weight Design for the 1989, 1992, and 1995 SCFs, and the Distribution of Wealth," *Review of Income and Wealth,* series 42, June 1999, pp. 193–215).

largest increases in net worth between 1995 and 1998: 24.0 percent for the mean and 49.9 percent for the median. The median net worth of all the work-status groups grew from 1989 to 1998, although from 1995 to 1998 it declined a small amount for families with heads who were neither working nor retired—including unemployed workers, students, homemakers, and others not currently working for pay.

Across the four principal regions of the country, the mean and median net worth of families increased from 1995 to 1998. However, the longer-term patterns are more mixed, reflecting such factors as differing cyclical variations in labor and housing markets across regions.

Mean and median net worth of homeowners moved up between 1995 and 1998, surpassing the 1989 levels for the first time since that year. For renters, mean and median net worth slipped a bit over the recent three-year period. Over the nine-year period, the mean net worth of renters declined about 10 percent, while their median net worth rose about 68 percent from a very low initial level. As noted later in this article, the proportion of homeowners has increased notably in recent years, and this movement may have entailed the transition of wealthier renters into home ownership.

ASSETS

Over the four surveys, the share of financial assets in families' total asset holdings has risen steadily, from 30.4 percent in 1989 to 40.6 percent in 1998 (table 4). Ownership and holdings of a broad spectrum of financial assets rose, but direct and indirect holdings of stocks were the most important factor in the rising share of financial assets (tables 5 and 6). By definition, the share of nonfinancial assets—mainly vehi-

3. Family net worth, by selected characteristics of families, 1989, 1992, 1995, and 1998 surveys
Thousands of 1998 dollars

Family characteristic	1989		1992		1995		1998	
	Median	Mean	Median	Mean	Median	Mean	Median	Mean
All families	**59.7**	**236.9**	**56.5**	**212.7**	**60.9**	**224.8**	**71.6**	**282.5**
	(5.2)	(50.1)	(3.3)	(13.8)	(2.4)	(14.9)	(4.1)	(16.4)
Income (1998 dollars)								
Less than 10,000	1.9	30.5	2.9	32.1	4.8	46.6	3.6	40.0
10,000–24,999	22.8	72.0	27.1	69.8	31.0	80.3	24.8	85.6
25,000–49,999	58.1	134.2	55.6	131.4	56.7	124.0	60.3	135.4
50,000–99,999	131.4	247.4	129.9	245.6	126.6	258.1	152.0	275.5
100,000 or more	542.1	1,378.3	481.9	1,300.8	511.4	1,411.9	510.8	1,727.8
Age of head (years)								
Less than 35	9.9	60.5	10.4	53.1	12.7	47.4	9.0	65.9
35–44	71.8	188.2	50.9	152.7	54.9	152.8	63.4	196.2
45–54	125.7	351.7	89.3	304.4	100.8	313.0	105.5	362.7
55–64	124.6	391.4	130.2	384.9	122.4	404.7	127.5	530.2
65–74	97.1	356.0	112.3	326.1	117.9	369.3	146.5	465.5
75 or more	92.2	307.4	99.2	244.4	98.8	273.8	125.6	310.2
Education of head								
No high school diploma	30.7	106.0	21.3	80.2	24.0	89.6	20.9	79.1
High school diploma	46.9	142.0	43.9	127.7	54.7	141.3	53.8	157.8
Some college	58.5	237.2	65.9	195.8	49.7	201.2	73.9	237.8
College degree	141.4	460.6	112.1	387.0	110.9	407.2	146.4	528.2
Race or ethnicity of respondent								
White non-Hispanic	90.5	289.6	79.5	253.5	81.2	265.9	94.9	334.4
Nonwhite or Hispanic	8.5	80.6	13.7	88.7	16.8	82.5	16.4	101.7
Current work status of head								
Working for someone else	48.3	145.0	44.7	139.6	51.9	145.2	52.4	168.9
Self-employed	216.0	829.0	164.7	682.3	165.5	742.0	248.1	919.8
Retired	84.2	232.5	80.7	214.0	86.2	239.4	113.0	307.2
Other not working	1.0	52.7	4.5	72.2	3.9	62.9	3.6	76.5
Region								
Northeast	111.1	275.1	73.2	240.0	88.0	266.9	94.2	302.4
North central	66.9	238.8	65.0	198.0	69.2	210.0	80.3	248.8
South	44.9	167.6	39.4	160.4	46.6	197.6	61.3	267.5
West	58.3	312.6	81.4	290.2	58.1	247.1	61.3	327.1
Housing status								
Owner	127.7	342.6	112.8	307.4	110.5	321.3	132.1	403.5
Renter or other	2.5	50.0	3.7	45.1	5.2	47.9	4.2	45.1

NOTE. See note to table 1.

cles, real estate, and businesses—fell correspondingly (table 7).

Overall, the percentage of families with assets moved up slightly, to 96.8 percent, between the 1995 and 1998 surveys (table 8). With ownership of assets in both surveys at 100 percent for families with incomes of $50,000 or more, this movement was the result of small increases for the lowest income groups. By age of family head, the ownership rate declined for the 45-to-54 group and the oldest group. Increases in median amounts of total assets were most pronounced for families with incomes of $50,000 or more, families headed by those aged 55 and older, and families in the top half of the net worth distribution.

Financial Assets

Largely continuing earlier trends, the composition of families' financial assets shifted from 1995 to 1998 (table 4). The share of financial assets held in transaction accounts and certificates of deposit fell sharply, to 15.7 percent in 1998—down from 19.7 percent in 1995 and 29.3 percent in 1989. The shares of savings bonds, other bonds, and the "other" category of financial assets have also fallen since 1989. Growth over the nine-year period was concentrated among stocks, mutual funds, tax-deferred retirement accounts, and other managed assets; together these assets accounted for 48.4 percent of financial assets in 1989 and 71.3 percent in 1998.

In both the 1995 and 1998 surveys, the proportion of families having financial assets rose with income; across age groups, the proportion owning financial assets does not vary much except for the lower frequency of ownership among the youngest age group (table 5). Within each survey, the median holding among families having such assets rose strongly with income. The median holding generally rose and then fell with age.

The overall proportion of families having any financial asset rose almost 2 percentage points from 1995 to 1998. Among all the demographic groups not already at or near 100 percent, the percentage of families with financial assets moved up except among families headed by those aged 75 or more. The largest increases were among families in the 55-to-64 age group, in the nonwhite or Hispanic group, among the group of families headed by someone neither working nor retired, among renters, and among families in the bottom 25 percent of the net worth distribution.

For families with financial assets, the median holding rose 35.8 percent overall across the three-year period.[11] Gains were spread broadly, but the largest were among families with incomes of $25,000 or more, families in the 65-to-74 age group, homeowners, families headed by the self-employed or retirees, with white non-Hispanic respondents, and those in the upper half of the distribution of net worth. The median level of financial assets fell for families with incomes of less than $25,000, those in the younger-than-35 group, and those that were renters.

Transaction Accounts and Certificates of Deposit

In 1998, 90.5 percent of families had some type of transaction account—a category comprising checking, savings, and money market deposit accounts, money market mutual funds, and call accounts at brokerages. The families without such accounts in 1998 were disproportionately likely to have low incomes; to be renters; to be in the bottom quarter of the distribution of net worth; to be headed by a person younger than 35 or at least 75; to be headed by a person neither working nor retired; and to have a nonwhite or Hispanic respondent (see box "Families without a Checking Account").

4. Value of financial assets of all families, distributed by type of asset, 1989, 1992, 1995, and 1998 surveys

Percent

Type of financial asset	1989	1992	1995	1998
Transaction accounts	19.1	17.5	14.0	11.4
Certificates of deposit	10.2	8.1	5.7	4.3
Savings bonds	1.5	1.1	1.3	0.7
Bonds	10.2	8.4	6.3	4.3
Stocks	15.0	16.5	15.7	22.7
Mutual funds (excluding money market funds)	5.3	7.7	12.7	12.5
Retirement accounts	21.5	25.5	27.9	27.5
Cash value of life insurance	6.0	6.0	7.2	6.4
Other managed assets	6.6	5.4	5.9	8.6
Other	4.8	3.8	3.4	1.7
Total	100	100	100	100
MEMO				
Financial assets as a percentage of total assets	30.4	31.5	36.6	40.6

NOTE. For this and following tables, see text for definition of asset categories. Also see note to table 1.

11. In discussing the dollar value of families' holdings of detailed components of net worth, we present only the median amounts held for those having such items. In general, the median is a statistically more robust indicator of the typical amount held than is the mean when relatively few members of a group hold an item or when a relatively large fraction of the total holdings is concentrated among a small proportion of families.

Families without a Checking Account

The portion of families without any type of transaction account has fallen in each SCF since 1989. In 1989, 14.9 percent of families did not have a transaction account. By 1998, the figure was 9.5 percent.[1]

The portion of families without a checking account also fell continuously, from 18.7 percent in 1989 to 13.2 percent in 1998 (data not shown). Among these families in 1998, 47.9 percent had owned a checking account at some time in the past. The great majority of families without a checking account—82.6 percent—had incomes of less than $25,000, and 44.7 percent of them had incomes of less than $10,000; 60.9 percent of them were headed by individuals under the age of 45, and 35.6 percent of them by those under 35; 57.1 percent of these families were nonwhite or Hispanic.

The survey asked all families without checking accounts to give the reason for not having an account (table). The proportion of families reporting that they did not like banks moved up from 15.3 percent in 1992 to 18.6 percent in 1995, and it stayed near this level in 1998. The proportion of families reporting that they did not write enough checks to make an account worthwhile edged up, to 28.4 percent in 1998, but was still below the levels seen in the 1989 and 1992 surveys. Altogether, 19.6 percent of families in 1998 reported that either minimum balances or service charges were too high. Only 1.2 percent reported that bank location or banking hours deterred them from having a checking account.

The pattern of responses for families that once had a checking account differs substantially from that of other families without accounts. Those who had accounts in the past were much more likely to report that fees were a deterrent and much less likely to report that they did not write enough checks or that they did not like banks.

1. For the definition of transaction account, see text. For a discussion of the ways that lower-income families obtain checking and credit services and the effects that developments in electronic transactions may have on such families, see Jeanne M. Hogarth and Kevin H. O'Donnell, "Banking Relationships of Lower-Income Families and the Governmental Trend toward Electronic Payment," *Federal Reserve Bulletin*, vol. 85 (July 1999), pp. 459–73.

Distribution of reasons cited by respondents for their families' not having a checking account, by reason, 1989, 1992, 1995, and 1998 surveys

Percent

Reason	1989	1992	1995	1998
Do not write enough checks to make it worthwhile	34.4	30.4	25.3	28.4
Minimum balance is too high	7.7	8.7	8.8	8.6
Do not like dealing with banks	15.0	15.3	18.6	18.5
Service charges are too high	8.6	11.3	8.4	11.0
Cannot manage or balance a checking account	5.0	6.5	8.0	7.2
No bank has convenient hours or location	1.2	.8	1.2	1.2
Do not have enough money	21.2	21.2	20.0	12.9
Credit problems	*	.7	1.4	2.7
Do not need/want an account	*	3.2	4.9	6.3
Other	6.8	1.9	3.5	3.1
Total	100	100	100	100

* Responses not coded separately in 1989.

From 1995 to 1998 the proportion of families having transaction accounts rose 3.5 percentage points.[12] Ownership of transaction accounts rose for every group that had less than a 100 percent ownership rate except for families in the 75-or-older group, for whom the ownership rate fell 3.5 percentage points. Gains in ownership were particularly large for the nonwhite or Hispanic group (7.7 percentage points), for families headed by those neither working nor retired (11.0 percentage points), and for families in the bottom quarter of the net worth distribution (8.4 percentage points).

Overall, median holdings of transaction accounts among those who had such accounts rose about one-third, to $3,100; holdings were steady or rose for all demographic groups considered here except families with incomes of less than $10,000 and renters.

Ownership of certificates of deposit, a traditional savings vehicle, also edged up over the three-year period, though it remained below the 1989 level. Increases for families in the bottom 90 percent of the net worth distribution were offset by a large decline in ownership by the wealthiest 10 percent of families. Overall, for those having certificates of deposit, the median value of holdings rose 41.5 percent over the period.

Savings Bonds and Other Bonds

The percentage of all families owning savings bonds fell substantially between 1995 and 1998. The ownership rate declined for every demographic group; the median holding among those with savings bonds hardly changed.

Other types of bonds—excluding bonds held through mutual funds, retirement accounts, and other managed assets—were held by only 3.0 percent of families in 1998, virtually unchanged from 1995.

12. This rise was driven in part by a notable increase in the proportion of families with savings accounts.

5. Family holdings of financial assets, by selected characteristics of families and type of asset, 1995 and 1998 surveys

A. 1995 Survey of Consumer Finances

Family characteristic	Transaction accounts	Certificates of deposit	Savings bonds	Bonds	Stocks	Mutual funds	Retirement accounts	Life insurance	Other managed assets	Other	Any financial asset
	Percentage of families holding asset										
All families	**87.0**	**14.3**	**22.8**	**3.1**	**15.2**	**12.3**	**45.2**	**32.0**	**3.9**	**11.1**	**91.0**
Income (1998 dollars)											
Less than 10,000	59.2	7.9	5.3	*	2.3	1.3	7.9	15.2	*	9.5	67.4
10,000–24,999	82.3	15.6	12.4	*	8.4	4.9	25.1	24.8	3.1	8.3	87.8
25,000–49,999	93.4	13.8	25.7	2.7	13.9	12.2	52.5	32.3	4.3	13.1	97.0
50,000–99,999	98.7	16.2	38.0	4.6	24.7	20.9	71.6	44.8	5.3	11.6	99.5
100,000 or more	99.8	20.0	38.2	14.6	43.6	36.7	84.3	52.6	8.1	14.7	100.0
Age of head (years)											
Less than 35	80.4	7.2	20.4	*	10.8	8.0	40.7	22.8	1.6	13.8	86.9
35–44	87.2	8.1	31.0	1.7	14.6	11.2	54.3	29.3	3.5	10.9	91.8
45–54	88.8	12.5	25.3	4.5	17.7	16.3	57.4	38.4	3.0	12.9	92.8
55–64	88.4	17.1	20.3	3.1	15.0	16.3	50.9	37.4	7.7	9.3	90.8
65–74	91.3	24.0	17.0	5.6	18.6	15.0	36.6	37.5	5.9	10.0	92.6
75 or more	93.2	34.7	15.3	7.0	19.7	10.3	15.7	35.8	5.2	5.4	94.2
Race or ethnicity of respondent											
White non-Hispanic	92.5	16.7	26.2	3.8	18.2	14.8	49.1	34.0	4.8	11.7	94.9
Nonwhite or Hispanic	68.1	6.2	10.8	0.6	5.1	3.6	31.5	24.8	1.0	9.1	77.4
Current work status of head											
Working for someone else	89.6	10.4	26.6	2.5	15.3	12.4	55.8	32.2	3.6	11.8	94.1
Self-employed	91.5	18.7	25.8	5.3	18.7	19.0	50.7	41.9	3.1	16.8	94.6
Retired	86.6	23.4	15.3	4.2	16.5	11.5	24.9	32.0	5.3	7.1	88.7
Other not working	58.1	7.8	12.6	*	4.3	4.3	18.4	13.7	*	11.5	65.2
Housing status											
Owner	95.0	17.4	28.3	4.3	19.2	16.0	54.3	38.8	5.0	9.5	96.5
Renter or other	72.4	8.7	12.7	.9	7.9	5.5	28.4	19.4	1.9	14.0	80.8
Percentiles of net worth											
Less than 25	63.7	1.8	8.4	*	2.9	1.9	15.1	11.3	*	9.1	71.6
25–49.9	89.1	8.7	19.9	*	8.8	5.3	41.9	27.4	1.9	10.7	94.3
50–74.9	96.1	17.7	27.3	1.4	13.5	11.3	51.8	38.4	3.4	11.3	97.9
75–89.9	98.7	27.1	34.8	4.9	29.2	23.4	66.3	47.3	6.3	10.9	100.0
90–100	99.7	32.2	36.5	18.2	45.6	41.8	80.2	56.1	14.5	17.3	100.0
	Median value of holdings for families holding asset (thousands of 1998 dollars)										
All families	**2.3**	**10.6**	**1.1**	**31.1**	**9.6**	**21.2**	**18.1**	**5.3**	**31.9**	**3.2**	**16.5**
Income (1998 dollars)											
Less than 10,000	.7	7.4	.3	*	1.6	26.6	5.3	2.1	*	2.1	1.4
10,000–24,999	1.3	10.6	.8	*	6.4	9.2	11.1	3.2	15.9	1.9	5.9
25,000–49,999	2.0	10.6	.7	30.8	6.4	13.8	10.6	5.0	22.3	2.1	13.3
50,000–99,999	4.4	13.8	1.3	15.9	7.4	17.8	24.6	7.4	42.5	5.0	44.0
100,000 or more	15.9	19.1	1.6	61.6	23.4	63.4	88.2	13.8	65.9	13.8	218.5
Age of head (years)											
Less than 35	1.3	5.6	.5	*	3.2	5.8	6.4	3.7	4.8	1.1	5.7
35–44	2.1	5.6	1.1	11.7	4.8	10.6	15.6	5.6	11.5	2.1	14.6
45–54	3.2	12.7	1.1	26.6	10.6	22.3	29.7	8.3	60.3	5.3	29.7
55–64	3.3	14.9	1.6	10.6	20.6	59.5	33.6	5.6	53.1	10.6	34.8
65–74	3.5	21.2	1.6	53.1	21.2	58.4	30.3	5.3	37.2	9.6	22.5
75 or more	5.3	13.8	5.1	42.5	19.1	53.1	25.0	5.3	69.0	37.2	24.3
Race or ethnicity of respondent											
White non-Hispanic	2.6	11.2	1.1	31.1	9.8	22.3	19.5	5.3	31.9	4.2	19.9
Nonwhite or Hispanic	1.5	10.6	0.5	28.7	2.5	6.8	12.7	5.6	6.4	1.4	6.2
Current work status of head											
Working for someone else	2.1	8.5	1.0	18.9	6.1	13.8	17.0	5.8	15.4	2.1	15.6
Self-employed	4.8	17.0	.9	53.1	19.1	26.6	26.0	6.4	45.7	4.2	26.5
Retired	3.2	16.5	2.7	41.4	20.2	53.1	27.6	4.5	53.1	10.6	20.6
Other not working	.6	9.0	0.4	*	5.5	24.4	12.7	3.7	*	5.3	2.7
Housing status											
Owner	3.2	11.7	1.1	41.4	10.6	23.4	21.5	6.4	37.2	5.3	26.0
Renter or other	1.3	8.5	1.1	7.4	3.9	10.6	7.6	3.7	14.9	1.7	4.9
Percentiles of net worth											
Less than 25	.6	1.4	.2	*	.6	2.1	1.3	1.3	*	.9	1.1
25–49.9	1.5	5.3	.6	*	1.9	3.7	8.0	3.6	9.0	1.6	8.9
50–74.9	2.7	10.6	1.1	10.6	5.0	10.6	17.0	5.3	11.5	4.2	26.2
75–89.9	7.0	15.9	1.6	21.2	10.6	22.3	37.7	7.4	26.6	10.6	88.6
90–100	20.7	37.2	2.9	74.4	53.1	86.0	104.1	18.1	125.3	31.9	341.0

5.—Continued

B. 1998 Survey of Consumer Finances

Family characteristic	Transaction accounts	Certificates of deposit	Savings bonds	Bonds	Stocks	Mutual funds	Retirement accounts	Life insurance	Other managed assets	Other	Any financial asset
	Percentage of families holding asset										
All families	**90.5**	**15.3**	**19.3**	**3.0**	**19.2**	**16.5**	**48.8**	**29.6**	**5.9**	**9.4**	**92.9**
Income (1998 dollars)											
Less than 10,000	61.9	7.7	3.5	*	3.8	1.9	6.4	15.7	*	8.0	70.6
10,000–24,999	86.5	16.8	10.2	1.3	7.2	7.6	25.4	20.9	4.9	8.2	89.9
25,000–49,999	95.8	15.9	20.4	2.4	17.7	14.0	54.2	28.1	3.9	10.2	97.3
50,000–99,999	99.3	16.4	30.6	3.3	27.7	25.8	73.5	39.8	8.0	9.1	99.8
100,000 or more	100.0	16.8	32.3	12.2	56.6	44.8	88.6	50.1	15.8	12.7	100.0
Age of head (years)											
Less than 35	84.6	6.2	17.2	1.0	13.1	12.2	39.8	18.0	1.9	10.1	88.6
35–44	90.5	9.4	24.9	1.5	18.9	16.0	59.5	29.0	3.9	11.8	93.3
45–54	93.5	11.8	21.8	2.8	22.6	23.0	59.2	32.9	6.5	9.1	94.9
55–64	93.9	18.6	18.1	3.5	25.0	15.2	58.3	35.8	6.5	8.4	95.6
65–74	94.1	29.9	16.1	7.2	21.0	18.0	46.1	39.1	11.8	7.3	95.6
75 or more	89.7	35.9	12.0	5.9	18.0	15.1	16.7	32.6	11.6	6.4	92.1
Race or ethnicity of respondent											
White non-Hispanic	94.7	17.9	22.2	3.7	22.1	18.8	53.7	32.1	7.1	9.7	96.3
Nonwhite or Hispanic	75.8	6.4	9.2	.4	9.1	8.4	32.0	20.8	1.7	8.3	81.2
Current work status of head											
Working for someone else	92.7	11.1	21.8	1.9	19.5	16.6	58.9	27.5	4.2	9.4	94.8
Self-employed	95.4	11.7	20.2	5.4	26.5	24.8	53.5	39.5	8.7	14.1	96.9
Retired	87.2	28.8	14.4	5.1	17.1	14.8	28.8	32.4	9.9	6.8	90.3
Other not working	69.1	7.6	11.8	*	8.8	4.8	17.5	17.6	*	10.9	75.2
Housing status											
Owner	96.2	18.9	23.3	3.8	24.9	21.0	58.4	36.9	7.7	8.7	97.5
Renter or other	79.2	8.3	11.5	1.3	8.0	7.5	30.1	15.2	2.4	10.8	84.1
Percentiles of net worth											
Less than 25	72.1	3.0	7.0	*	3.1	2.1	18.4	10.8	*	7.9	78.0
25–49.9	91.4	9.8	16.3	*	9.4	8.7	44.2	23.7	2.3	10.0	94.7
50–74.9	98.5	19.7	23.9	2.2	18.8	15.1	56.4	35.6	5.9	8.3	99.1
75–89.9	99.7	30.0	27.9	3.4	36.3	35.7	71.9	45.7	10.1	10.2	99.9
90–100	100.0	26.9	33.1	16.9	58.9	46.4	82.9	52.1	22.2	13.1	100.0
	Median value of holdings for families holding asset (thousands of 1998 dollars)										
All families	**3.1**	**15.0**	**1.0**	**44.8**	**17.5**	**25.0**	**24.0**	**7.3**	**31.5**	**3.0**	**22.4**
Income (1998 dollars)											
Less than 10,000	.5	7.0	1.8	*	14.0	6.0	7.5	3.0	*	.5	1.1
10,000–24,999	1.3	20.0	1.0	8.4	10.0	26.0	8.0	5.0	30.0	1.1	4.8
25,000–49,999	2.5	14.5	.6	25.0	8.0	11.0	13.0	5.0	15.0	2.0	17.6
50,000–99,999	6.0	13.3	1.0	19.0	15.0	25.0	31.0	9.5	32.0	5.0	57.2
100,000 or more	19.0	22.0	1.5	108.0	55.0	65.0	93.0	18.0	100.0	25.0	244.3
Age of head (years)											
Less than 35	1.5	2.5	.5	3.0	5.0	7.0	7.0	2.7	19.4	1.0	4.5
35–44	2.8	8.0	.7	55.3	12.0	14.0	21.0	8.5	25.0	2.5	22.9
45–54	4.5	11.5	1.0	31.7	24.0	30.0	34.0	10.0	39.3	6.0	37.8
55–64	4.1	17.0	1.5	100.0	21.0	58.0	46.8	9.5	65.0	10.0	45.6
65–74	5.6	20.0	2.0	52.0	50.0	60.0	38.0	8.5	41.3	6.0	45.8
75 or more	6.1	30.0	5.0	18.8	50.0	59.0	30.0	5.0	30.0	8.2	36.6
Race or ethnicity of respondent											
White non-Hispanic	3.7	17.0	1.0	46.0	20.0	29.0	26.0	7.5	32.0	4.0	29.9
Nonwhite or Hispanic	1.5	6.3	.7	14.2	9.0	10.0	13.0	5.0	23.0	1.0	6.4
Current work status of head											
Working for someone else	2.7	9.0	.7	15.0	10.0	16.0	20.0	7.0	30.0	1.8	19.0
Self-employed	6.3	22.0	.9	150.0	52.0	40.0	49.5	11.5	39.3	7.0	45.0
Retired	5.0	24.0	2.5	50.0	50.0	55.0	31.0	6.0	32.0	7.0	32.8
Other not working	1.0	10.0	.8	*	11.0	17.5	15.0	5.0	*	0.5	2.5
Housing status											
Owner	5.0	18.0	1.0	41.5	20.0	30.0	30.0	8.0	32.0	5.0	41.2
Renter or other	1.1	10.0	.6	50.0	8.0	12.0	7.5	5.0	23.0	1.0	3.4
Percentiles of net worth											
Less than 25	.6	1.5	.2	*	.7	1.5	2.0	1.2	*	.5	1.1
25–49.9	1.7	6.2	.5	*	3.0	6.0	8.1	5.0	10.0	1.8	10.4
50–74.9	4.8	15.0	1.0	10.0	8.0	14.0	28.0	7.0	21.4	6.0	42.7
75–89.9	10.5	25.0	2.0	25.0	26.3	35.3	59.8	10.0	23.4	7.0	144.4
90–100	23.0	44.0	2.0	100.0	85.0	107.0	125.0	20.0	120.0	20.0	456.8

NOTE. See note to table 1.

* Ten or fewer observations.

At the same time, the median amount of bonds among families that had them rose 44.1 percent. Changes for the different demographic groups were quite mixed, but among the groups with relatively large holdings in 1995—the top income and top net worth groups—ownership moved down while the median holding rose substantially. The increase in the median holding for families headed by the self-employed was also notable. Given the sparseness of bond ownership among most other groups, estimates of the amounts of their holdings are subject to a relatively high level of statistical variability.

Publicly Traded Stocks

The fraction of families having direct ownership of publicly traded stocks—that is, stocks other than those held through mutual funds, retirement accounts, or other managed assets—rebounded to 19.2 percent in 1998; the proportion had fallen to 15.2 percent in 1995 from about 17 percent in both 1989 and 1992. Although the largest increases in ownership were in the highest income and net worth groups, almost all of the groups showed some increase. Among families with incomes from $25,000 to $49,999, the proportion owning stock rose 3.8 percentage points. For those in the 55-to-64 age group, the increase was 10.0 percentage points. Some of the additional ownership may be attributable to the increasing ease of individual stock trading.

Fueled by a rising stock market, the median amount of stock held by those having direct holdings rose 82.3 percent, from $9,600 in 1995 to $17,500 in 1998.[13] Most of the demographic groups also had large proportional increases. Among the work-status groups, the increases in holdings were most notable for the self-employed and retired. Of all the demographic categories, only one, the 55-to-64 age group, had minimal growth in their holdings over the period, probably because of an influx of new owners with relatively small holdings.

Mutual Funds

Continuing a trend going back at least to 1989, the proportion of families owning mutual funds of any type (excluding money market funds or funds held through retirement accounts or other managed assets) rose 4.2 percentage points, to 16.5 percent, between 1995 and 1998. Ownership increased substantially for most of the demographic groups, and it eased off only for the families in the 55-to-64 age group, which had a particularly large rise in the fraction of families with directly held stock.

Between 1995 and 1998, median holdings of mutual funds among those who had them rose 17.9 percent. The changes in holdings over demographic groups were more mixed than was the case for directly held stocks, but increases were nonetheless broadly spread. As was the case with bonds and directly held stocks, the increase among the work-status groups was particularly notable for the self-employed. Among the net worth groups, the largest proportional increases were for families between the 25th and 90th percentiles of the distribution.

Retirement Accounts

Continuing earlier trends, the ownership of tax-deferred retirement accounts rose broadly, from 45.2 percent of families in 1995 to 48.8 percent in 1998.[14] Across the income groups, ownership declined only among the under-$10,000 group; however, the shrinkage of this group over the three years suggests that its composition may have changed in important ways. Ownership also declined for the younger-than-35 and neither-working-nor-retired groups. Ownership of retirement accounts increased 4.6 percentage points for families with white non-Hispanic respondents, while it rose ½ percentage point for other families.

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13. During the interview period of the 1998 survey—July to December—the stock market, as measured by the Wilshire index of 5000 companies, slipped from an average of 10,770 in July to 9,270 in September but bounced back to an average of 10,840 in December. This variation raises a concern that the net worth values reported in the survey may be affected by the date of the interview. Regression analysis of the 1998 survey data suggests that the reporting of equity values was not significantly affected by fluctuations in the value of the market index except for families that were relatively active stock traders. Reporting by other families may have been based on brokerage statements, which are typically mailed quarterly.

14. The tax-deferred retirement accounts include individual retirement accounts (IRAs), Keogh accounts, and certain employer-sponsored accounts. The amounts held in retirement accounts may be invested in virtually any asset, including stocks, bonds, mutual funds, options, and real estate.

Here, employer-sponsored accounts are those from current jobs held by the family head and that person's spouse or partner as well as those from past jobs held by them. The accounts from current jobs are restricted to those in which loans or withdrawals can be made, such as 401(k) accounts; those from past jobs are restricted to accounts from which the family expects to receive the account balance in the future. These restrictions on the types of accounts are intended to confine the analysis to amounts that are portable across jobs and to which families will ultimately have full access. Earlier articles on the survey in the *Federal Reserve Bulletin* included only the accounts from current jobs.

For families with tax-deferred retirement accounts, median holdings jumped 32.6 percent. Increases appeared in all the demographic groups except renters and families with incomes from $10,000 to $24,999. The median value of holdings of the white non-Hispanic group rose considerably, but for the nonwhite or Hispanic group, median holdings only edged up.

Tax-deferred retirement accounts are only a part of the retirement assets that families have. Many families also have coverage under defined-benefit pension plans, which typically provide annuity income at retirement based on workers' salaries and years of service. Most families also have some entitlement to social security retirement income. Unfortunately, future retirement income from these sources is difficult to value because it depends crucially on assumptions about future events and conditions—work decisions, earnings, inflation rates, discount rates, mortality, and so on. Because of the lack of widely agreed standards for these assumptions, this article does not include a measure of the present value of such income in families' net worth.[15]

However, the survey does provide general information on pension coverage, which consists of defined-benefit plans and defined-contribution—that is, account-type—plans. According to the 1998 survey, 41.0 percent of families had some type of pension coverage through a current job of either the family head or the spouse or partner of that person; the level was 39.1 percent in 1995 (not shown in table). Continuing a trend away from defined-benefit pension plans, the share of families with pension coverage through a current job that participated in a defined-benefit plan slipped from 47.5 percent in 1995 to 42.9 percent in 1998, while the share participating in an account-type plan rose from 73.9 percent in 1995 to 79.4 percent in 1998. The share with both types of plans went up from 21.4 percent in 1995 to 22.3 percent in 1998.

In many account-type pension plans, contributions may be made by the employer, the worker, or both. In some cases these contributions represent a substantial amount of saving, though workers may offset this saving by reducing their saving in other forms. The employer's contributions also represent additional income for the worker. In 1998, 82.7 percent of families with account-type pension plans on a current job had employers who made a contribution to the plan, and 86.6 percent of families with such plans made contributions themselves.

Participation in defined-contribution plans is usually voluntary. In 1998, 22.7 percent of family heads who were eligible to participate in such a plan failed to do so, down from 26.0 percent in 1995. The data indicate that this choice is related strongly to income: Heads of families with incomes of less than $25,000 were less likely to participate than others. Among the family heads who were eligible but chose not to participate, 40.2 percent were covered by a defined-benefit plan.

Cash Value Life Insurance

Cash value life insurance combines insurance coverage in the form of a death benefit with an investment vehicle. Some types of cash value policies offer a high degree of choice on the investments. Like returns earned within IRAs, Keoghs, and personal annuities, investment returns on cash value life insurance are typically shielded from taxation until money is withdrawn. Ownership of cash value policies declined 2.4 percentage points between 1995 and 1998. This decline continued a downward trend from the 1989 survey, and it was shared by almost every demographic group. This movement may reflect several factors. First, other investments may have become more attractive to consumers than cash value insurance. Second, term life insurance—which pays a death benefit if the insured dies within the term of the coverage but pays nothing otherwise—has been competitive with cash value insurance; in addition, advances in the availability of information may have made it easier for consumers to compare costs. Finally, consumers' demand for life insurance may have eased somewhat: As with the ownership of cash value insurance, ownership of any type of life insurance policy has slipped, from 75.1 percent of families in 1989 to 69.2 percent in 1998.

For families that held cash value insurance, the median cash value increased 37.7 percent between 1995 and 1998. The median also rose for all groups except the youngest and oldest age classes, families with incomes from $25,000 to $49,999, and families in the bottom quarter of the distribution of net worth. The decline in ownership, taken together with the increase in the median holding, suggests that the typical family owning this asset is using it more intensively as an investment vehicle.

15. For one possible calculation of net worth that includes the annuity value of pension benefits and social security retirement payments, see Arthur B. Kennickell and Annika E. Sundén, *Pensions, Social Security, and the Distribution of Wealth,* Finance and Economics Discussion Series 1997–55 (Board of Governors of the Federal Reserve System, October 1997). Papers in this series from 1996 to date are available at www.federalreserve.gov/pubs/feds.

Other Managed Assets

Ownership of other managed assets—including personal annuities and trusts with an equity interest and managed investment accounts—rose from 3.9 percent of families in 1995 to 5.9 percent in 1998. Part of the rise is attributable to the increased holding of personal annuities with an equity interest: 4.5 percent of families had such annuities in 1998, up from 3.9 percent in 1995.[16] Most groups increased their ownership of other managed assets over the three-year period, with a particularly notable rise for families with incomes of $100,000 or more and those in the top 10 percent of the distribution of net worth.

Median holdings for those having other managed assets declined slightly. In light of the sparseness of ownership for many of the groups, much of the large change observed in various groups is likely attributable to sampling variation.

Other Financial Assets

For the other financial assets—a heterogeneous category including oil and gas leases, futures contracts, royalties, proceeds from lawsuits or estates in settlement, and loans made to others—ownership fell 1.7 percentage points from 1995 to 1998. The decline was broadly spread across demographic groups. For those having such assets, the median holding dipped about $200 from the 1995 level. The pattern of changes across the demographic groups appears to have no straightforward interpretation.

Publicly traded companies have increasingly been offering stock options to their employees as a form of compensation.[17] Although such stock options, when executed, may make an appreciable contribution to family net worth, the survey did not specifically ask for the value of these options because their valuation is not straightforward until their exercise date.[18] Instead, in 1998 the survey for the first time asked whether the family head or that person's spouse or partner had been given stock options by an employer during the preceding year. Overall, 11.2 percent of families in the 1998 survey reported having received stock options.

Direct and Indirect Holdings
of Publicly Traded Stocks

Families may hold stock in publicly traded companies in many different ways—through direct ownership of shares or through mutual funds, retirement accounts, or other managed assets—and information about each of these asset types is collected separately in the SCF. When all these forms of stock ownership are combined, the data show considerable growth in stock ownership in every survey since 1989 (table 6). In 1998, 48.8 percent of families owned stock equity through some means. Since 1989, the ownership rate has grown 17.2 percentage points, with nearly half of the gain since 1995. Between 1995 and 1998, ownership rose for all family income and age groups; among these, the increases were largest in the $50,000–$99,999 income group and the 55-to-64 age group.

Not surprisingly, given the robust growth in stock prices, the median value of stock holdings among those having any rose strongly—from $15,400 in 1995 to $25,000 in 1998, a 62.3 percent increase. Moreover, the proportion of financial assets attributable to all forms of stock ownership also moved up, from 40.0 percent in 1995 to 53.9 percent in 1998. The rise reflects both an increase in the market valuation of stocks and the increased tendency of families to hold stock.

Nonfinancial Assets

Nonfinancial assets as a proportion of the total assets of all families fell from 69.6 percent in 1989 to 59.4 percent in 1998 (table 7). The proportion of nonfinancial assets attributable to the primary residence or other residential property held steady at about 55 percent over the 1989–98 period. At the same time, the part attributable to vehicles and net equity in privately owned businesses rose slightly, while the proportion attributable to net equity in nonresidential properties and other nonfinancial assets fell. The patterns across demographic groups in 1995 and 1998 are similar to those seen for financial assets: Ownership and median holdings rise with income; by age group, they rise initially and then decline (table 8).

Overall, the proportion of families with any type of nonfinancial asset slipped a bit, from 90.9 percent in

16. In 1998, the SCF questionnaire was changed so that information on annuities was collected separately from information on trusts and managed investment accounts. The earlier surveys had asked about the total value of holdings in these types of assets after respondents had specified the types they had. Some of the increase in the ownership of annuities may reflect this change.

17. See David Lebow, Louise Sheiner, Larry Slifman, and Martha Starr-McCluer, *Recent Trends in Compensation Practices,* Finance and Economics Discussion Series 1999-32 (Board of Governors of the Federal Reserve System, July 1999).

18. Because such options are typically not publicly traded, their value is uncertain until the exercise date; until then, meaningful valuation would require complex assumptions about future movements in stock prices.

6. Direct and indirect family holdings of stock, by selected characteristics of families, 1989, 1992, 1995, and 1998 surveys
Percent except as noted

Family characteristic	Families having stock holdings, direct or indirect[1]				Median value among families with holdings (thousands of 1998 dollars)				Stock holdings as share of group's financial assets			
	1989	1992	1995	1998	1989	1992	1995	1998	1989	1992	1995	1998
All families	**31.6**	**36.7**	**40.4**	**48.8**	**10.8**	**12.0**	**15.4**	**25.0**	**27.8**	**33.7**	**40.0**	**53.9**
Income (1998 dollars)												
Less than 10,000	*	6.8	5.4	7.7	*	6.2	3.2	4.0	*	15.9	12.9	24.8
10,000–24,999	12.7	17.8	22.2	24.7	6.4	4.6	6.4	9.0	11.7	15.3	26.7	27.5
25,000–49,999	31.5	40.2	45.4	52.7	6.0	7.2	8.5	11.5	16.9	23.7	30.3	39.1
50,000–99,999	51.5	62.5	65.4	74.3	10.2	15.4	23.6	35.7	23.2	33.5	39.9	48.8
100,000 or more	81.8	78.3	81.6	91.0	53.5	71.9	85.5	150.0	35.3	40.2	46.4	63.0
Age of head (years)												
Less than 35	22.4	28.3	36.6	40.7	3.8	4.0	5.4	7.0	20.2	24.8	27.2	44.8
35–44	38.9	42.4	46.4	56.5	6.6	8.6	10.6	20.0	29.2	31.0	39.5	54.7
45–54	41.8	46.4	48.9	58.6	16.7	17.1	27.6	38.0	33.5	40.6	42.9	55.7
55–64	36.2	45.3	40.0	55.9	23.4	28.5	32.9	47.0	27.6	37.3	44.4	58.3
65–74	26.7	30.2	34.4	42.6	25.8	18.3	36.1	56.0	26.0	31.6	35.8	51.3
75 or more	25.9	25.7	27.9	29.4	31.8	28.5	21.2	60.0	25.0	25.4	39.8	48.7

NOTE. See note to table 1.
1. Indirect holdings are those in mutual funds, retirement accounts, and other managed assets.
* Ten or fewer observations.

1995 to 89.9 percent in 1998. Declines were spread fairly evenly over most demographic groups except the income and net worth groups, in which the decreases were largest for families at the lower ends of the scales. The median holding of nonfinancial assets for all families with such assets rose 11 percent over the three-year period. Although most groups shared in the rise, the increases in the medians for the nonwhite or Hispanic group and for the self-employed were particularly noteworthy.

Vehicles

Vehicles continue to be the most widely held nonfinancial asset; 86 percent of families either owned them (table 8) or leased them (not shown) in both the 1995 and 1998 surveys.[19] Although the share of families leasing vehicles is still fairly small (6.4 percent in 1998), it has been growing quickly, while the rate of ownership slid down a bit between 1995 and 1998, to 82.8 percent.[20]

Between the 1992 and 1995 surveys, the greatest growth in leasing was among families with incomes of $100,000 or more. However, between the 1995 and 1998 surveys, the growth of leasing among families in that income group had leveled off, while it had picked up among families with incomes below $50,000.

Among owners, the median value of owned vehicles rose about $300 between 1995 and 1998, a 2.9 percent increase. Across income groups, the value of vehicles owned rose notably only for families with incomes of $100,000 or more. The median value of vehicles owned also increased substantially for families in the top 10 percent of the net worth distribution and in the 55-or-older age groups.

Primary Residence and Other Residential Real Estate

Continuing a trend since 1989, home ownership rose 1.5 percentage points from 1995, reaching 66.2 per-

7. Value of nonfinancial assets of all families, distributed by type of asset, 1989, 1992, 1995, and 1998 surveys
Percent

Type of nonfinancial asset	1989	1992	1995	1998
Vehicles	5.6	5.7	7.1	6.5
Primary residence	45.9	47.0	47.4	47.1
Other residential property	8.1	8.5	8.0	8.5
Equity in nonresidential property	11.0	10.9	7.9	7.7
Business equity	26.9	26.3	27.3	28.5
Other	2.5	1.6	2.3	1.7
Total	100	100	100	100
MEMO				
Nonfinancial assets as a share of total assets	69.6	68.5	63.4	59.4

NOTE. See note to table 1.

19. Vehicles include automobiles, vans, trucks, sport utility vehicles, motorcycles, recreational vehicles, airplanes, and boats that are owned for personal use. Counting families that have personal use of a car owned by a business raises the proportion of families with a vehicle to 87.2 percent in 1998.

20. The share of families leasing a vehicle was 2.9 percent in 1992 and 4.5 percent in 1995. Leased vehicles represented 25.0 percent of all new vehicles acquired by families in 1998, up from 20.5 percent in 1995 and 10.1 percent in 1992. For additional evidence on vehicle leasing, see Ana Aizcorbe and Martha Starr-McCluer, "Vehicle Ownership, Vehicle Acquisitions and the Growth of Auto Leasing," *Monthly Labor Review*, vol. 120 (June 1997), pp. 34–40.

8. Family holdings of nonfinancial assets, by selected characteristics of families and type of asset, and of any asset, by family characteristic, 1995 and 1998 surveys

A. 1995 Survey of Consumer Finances

Family characteristic	Vehicles	Primary residence	Other residential property	Equity in nonresidential property	Business equity	Other	Any nonfinancial asset	Any asset
	Percentage of families holding asset							
All families	**84.1**	**64.7**	**11.8**	**9.4**	**11.1**	**9.0**	**90.9**	**96.3**
Income (1998 dollars)								
Less than 10,000	54.9	36.1	3.9	4.0	4.8	3.8	66.8	83.0
10,000–24,999	82.3	54.9	7.0	5.5	6.6	5.9	89.4	96.0
25,000–49,999	91.7	67.0	9.9	8.0	9.4	9.4	96.4	99.7
50,000–99,999	93.4	84.5	16.7	14.5	16.3	11.0	98.8	100.0
100,000 or more	91.6	91.1	38.4	24.5	31.5	23.0	99.5	100.0
Age of head (years)								
Less than 35	83.8	37.9	4.2	3.6	8.3	7.2	87.1	94.3
35–44	84.7	64.7	9.7	7.1	14.3	10.0	90.6	96.0
45–54	88.2	75.3	16.3	14.3	15.5	11.4	93.6	97.3
55–64	88.4	82.0	19.9	13.4	12.7	10.2	93.9	96.4
65–74	82.5	79.5	16.1	16.2	8.7	9.0	92.6	97.7
75 or more	72.2	72.8	12.2	6.4	3.7	5.6	89.9	98.4
Race or ethnicity of respondent								
White non-Hispanic	88.2	70.6	13.2	10.4	12.8	10.6	95.1	98.6
Nonwhite or Hispanic	69.7	44.3	7.1	5.7	5.3	3.6	76.3	88.5
Current work status of head								
Working for someone else	89.9	63.8	10.3	8.0	6.9	9.6	93.9	98.6
Self-employed	86.1	74.5	21.3	22.2	58.1	15.5	96.0	97.8
Retired	76.2	70.6	13.1	8.5	3.3	5.8	88.1	95.6
Other not working	59.0	34.4	5.0	4.2	4.0	5.9	66.2	76.9
Housing status								
Owner	90.9	100.0	15.1	12.1	13.7	10.5	100.0	100.0
Renter or other	71.6	...	5.7	4.4	6.3	6.3	74.1	89.6
Percentiles of net worth								
Less than 25	65.4	13.7	*	.9	1.6	3.0	68.4	85.3
25–49.9	87.8	64.1	5.4	4.5	5.7	7.0	96.3	100.0
50–74.9	90.9	88.3	11.1	9.0	12.3	10.5	99.0	100.0
75–89.9	92.3	92.2	21.3	15.8	16.5	12.4	99.8	100.0
90–100	92.3	93.5	42.6	33.8	37.1	20.3	99.9	100.0
	Median value of holdings for families holding asset (thousands of 1998 dollars)							
All families	**10.5**	**95.6**	**53.1**	**31.9**	**47.8**	**9.3**	**88.1**	**108.1**
Income (1998 dollars)								
Less than 10,000	4.0	41.4	28.0	15.9	54.1	6.2	14.2	13.5
10,000–24,999	6.2	69.0	31.9	14.9	35.1	6.4	45.7	55.5
25,000–49,999	11.1	85.0	45.1	42.5	26.0	6.2	84.0	104.4
50,000–99,999	16.9	126.4	63.7	21.2	31.9	14.3	146.7	202.2
100,000 or more	24.4	196.5	106.2	106.2	265.5	19.1	314.7	608.5
Age of head (years)								
Less than 35	9.4	80.7	36.1	12.7	21.2	5.3	23.2	34.1
35–44	11.3	100.9	49.9	18.1	37.2	10.6	102.2	118.1
45–54	13.7	106.2	63.7	19.1	74.4	10.6	120.0	159.8
55–64	12.2	92.4	58.4	67.8	69.0	10.6	114.7	170.8
65–74	8.7	90.3	60.5	42.5	106.8	14.9	100.7	132.9
75 or more	5.6	85.0	28.7	6.4	37.4	8.5	83.9	102.3
Race or ethnicity of respondent								
White non-Hispanic	11.4	96.7	58.4	34.0	53.1	10.6	99.5	126.3
Nonwhite or Hispanic	7.8	74.4	30.9	21.2	27.9	6.9	37.0	40.9
Current work status of head								
Working for someone else	11.5	95.6	49.9	18.1	22.3	10.6	86.4	105.0
Self-employed	13.4	127.5	85.0	55.8	79.7	8.5	189.0	243.5
Retired	7.8	80.7	47.8	37.2	106.2	10.6	83.9	102.0
Other not working	6.6	63.7	45.1	53.1	21.2	7.4	21.2	22.3
Housing status								
Owner	12.7	95.6	55.2	37.2	58.4	10.6	123.0	168.1
Renter or other	6.7	...	39.8	12.7	23.4	5.3	7.9	13.1
Percentiles of net worth								
Less than 25	4.8	28.7	*	2.1	1.6	2.7	6.2	6.1
25–49.9	9.1	53.1	29.7	7.4	10.6	5.3	43.6	51.7
50–74.9	11.9	90.3	32.4	10.6	23.4	8.5	107.7	137.1
75–89.9	15.1	136.0	53.1	37.2	95.6	10.6	180.5	273.3
90–100	21.6	196.5	132.8	108.9	345.2	26.6	421.2	802.3

8.—Continued

B. 1998 Survey of Consumer Finances

Family characteristic	Vehicles	Primary residence	Other residential property	Equity in nonresidential property	Business equity	Other	Any nonfinancial asset	Any asset
	Percentage of families holding asset							
All families	**82.8**	**66.2**	**12.8**	**8.6**	**11.5**	**8.5**	**89.9**	**96.8**
Income (1998 dollars)								
Less than 10,000	51.3	34.5	*	*	3.8	2.6	62.7	83.8
10,000–24,999	78.0	51.7	5.8	5.0	5.0	5.6	85.9	96.4
25,000–49,999	89.6	68.2	11.4	7.6	10.3	9.4	95.6	99.2
50,000–99,999	93.6	85.0	19.0	12.0	15.0	10.2	98.0	100.0
100,000 or more	88.7	93.3	37.3	22.6	34.7	17.1	98.9	100.0
Age of head (years)								
Less than 35	78.3	38.9	3.5	2.7	7.2	7.3	83.3	94.8
35–44	85.8	67.1	12.2	7.5	14.7	8.8	92.0	97.6
45–54	87.5	74.4	16.2	12.2	16.2	9.2	92.9	96.7
55–64	88.7	80.3	20.4	10.4	14.3	8.5	93.8	98.2
65–74	83.4	81.5	18.4	15.3	10.1	10.3	92.0	98.5
75 or more	69.8	77.0	13.6	8.1	2.7	7.0	87.2	96.4
Race or ethnicity of respondent								
White non-Hispanic	87.3	71.8	14.1	9.4	13.2	10.0	93.8	98.8
Nonwhite or Hispanic	67.2	46.8	8.4	5.8	5.4	3.1	76.4	89.9
Current work status of head								
Working for someone else	87.6	63.5	10.6	6.7	5.5	8.8	92.4	98.2
Self-employed	89.5	81.3	25.3	17.7	63.4	13.3	98.1	99.2
Retired	73.3	72.4	14.3	10.1	3.6	6.4	85.2	94.7
Other not working	58.5	35.8	4.5	*	3.7	*	66.3	85.7
Housing status								
Owner	90.6	100.0	16.8	11.3	14.5	9.5	100.0	100.0
Renter or other	67.6	. . .	5.1	3.3	5.4	6.4	70.1	90.7
Percentiles of net worth								
Less than 25	62.3	14.1	*	*	1.4	2.5	65.2	87.4
25–49.9	87.4	67.2	5.8	3.5	6.5	8.0	96.1	100.0
50–74.9	90.4	89.3	11.8	7.9	10.6	8.9	99.1	100.0
75–89.9	90.8	94.0	26.2	16.7	17.9	11.4	99.3	100.0
90–100	92.0	95.1	41.7	30.6	41.4	18.8	99.6	100.0
	Median value of holdings for families holding asset (thousands of 1998 dollars)							
All families	**10.8**	**100.0**	**65.0**	**38.0**	**60.0**	**10.0**	**97.8**	**123.5**
Income (1998 dollars)								
Less than 10,000	4.0	51.0	*	*	37.5	5.0	16.3	11.7
10,000–24,999	5.7	71.9	70.0	25.0	31.1	5.0	43.7	46.2
25,000–49,999	10.2	85.0	50.0	28.0	37.5	6.0	83.5	112.0
50,000–99,999	16.6	130.0	60.0	30.0	56.0	12.0	156.3	233.2
100,000 or more	26.8	240.0	132.0	114.1	230.0	36.0	380.0	665.6
Age of head (years)								
Less than 35	8.9	84.0	42.5	25.0	34.0	5.0	22.7	28.9
35–44	11.4	101.0	45.0	20.0	62.5	8.0	103.5	128.0
45–54	12.8	120.0	74.0	45.0	100.0	14.0	126.8	178.9
55–64	13.5	110.0	70.0	54.0	62.5	28.0	126.9	198.2
65–74	10.8	95.0	75.0	45.0	61.1	10.0	109.9	165.2
75 or more	7.0	85.0	103.0	54.0	40.0	10.0	96.1	135.0
Race or ethnicity of respondent								
White non-Hispanic	11.8	100.0	67.0	42.5	67.6	10.0	107.6	144.9
Nonwhite or Hispanic	8.0	85.0	59.0	24.0	30.0	5.0	52.0	43.1
Current work status of head								
Working for someone else	11.2	98.0	50.0	24.0	30.0	7.0	89.6	112.4
Self-employed	15.5	150.0	85.0	80.0	100.0	50.0	256.6	329.3
Retired	8.6	89.0	100.0	50.0	50.0	10.0	97.8	134.5
Other not working	7.2	90.0	64.6	*	39.0	*	28.5	18.0
Housing status								
Owner	13.2	100.0	65.0	45.0	75.0	13.0	130.6	193.3
Renter or other	6.2	. . .	64.6	15.0	31.0	5.0	7.2	11.6
Percentiles of net worth								
Less than 25	4.9	40.0	*	*	3.5	1.0	6.4	5.9
25–49.9	8.6	60.0	37.5	10.0	12.0	5.0	51.5	60.7
50–74.9	12.6	95.0	35.0	21.0	40.0	8.8	118.0	165.4
75–89.9	15.5	140.0	80.0	45.0	87.5	15.0	218.5	362.5
90–100	23.3	250.0	151.5	120.0	300.0	55.0	519.0	973.7

NOTE. See note to table 1. * Ten or fewer observations. . . . Not applicable.

cent in 1998. Ownership grew strongly for families with incomes of $100,000 or more, for families headed by those younger than 45 or those 65 or older, for those with nonwhite or Hispanic respondents, and for families headed by the self-employed. Home ownership fell for families with less than $25,000 of income and for families headed by those aged 45 to 64.

The median value of a primary residence among homeowners rose only 4.6 percent from 1995 to 1998, but increases for some groups were very large: 23.2 percent for families with less than $10,000 of income, 22.1 percent for those with incomes of $100,000 or more, 13.0 percent for the 45-to-54 age group, and 27.2 percent among the wealthiest 10 percent of families. The median home value for families with nonwhite or Hispanic respondents increased 14.2 percent, compared with 3.4 percent for other families.[21]

In 1998, 12.8 percent of families had some form of residential real estate besides a primary residence (second homes, time shares, one- to four-family rental properties, and other types of residential property), up from 11.8 percent in 1995. The pattern of changes was mixed across demographic groups, with a notable increase for families headed by the self-employed. For families with this kind of property, the median value of their property rose 22.4 percent over the three-year period. Percentage gains were particularly large for families in the 75-or-older age group, for families with nonwhite or Hispanic respondents, and for families headed by retirees; however, because relatively few families in these groups have such property, these estimates may be imprecise.

Net Equity in Nonresidential Real Estate

Continuing a trend observed since the 1989 SCF, ownership of nonresidential real estate (commercial properties, rental properties with five or more units, farm land, undeveloped land, and all other types of nonresidential real estate except property owned through a business) slipped between 1995 and 1998. This trend partly reflects the expiration of real estate partnerships that had been established before changes in the tax code limited the deductibility of losses on investments in which a person has a "passive" interest. Ownership fell for most of the demographic groups; notable exceptions were families headed by those aged 75 or more and by retirees.

Among owners of nonresidential real estate, the median net equity in such property—its value less the amount of any outstanding loans secured by it—rose 19.1 percent over the 1995–98 period. The increase was shared by most of the demographic groups.

Net Equity in Privately Held Businesses

In 1998, 11.5 percent of families owned privately held business interests, a proportion that has hardly changed since 1989.[22] Between 1995 and 1998, business ownership rose 3.2 percentage points for families with $100,000 or more of income, while moving only slightly for the other income groups.

Among families with business interests, the median value of the business net of borrowing done by the business rose 25.5 percent over the three-year period. Changes were quite mixed across the demographic groups considered. The median increased for families with incomes from $25,000 to $99,999 but declined for the other income groups. By age of family head, the median fell for the 55-to-74 groups, while it rose for the others. The median holding fell for families in the top 25 percent of the net worth distribution, for whom business interests have been a key asset. The increase in business ownership for these families suggests that the decline in the median may have been driven by the startup of new businesses that have relatively low initial net values and possibly by the change in form of ownership of particularly successful businesses to that of publicly traded corporation.

Other Nonfinancial Assets

For the remaining nonfinancial assets (a broad category of tangible items including artwork, jewelry, precious metals, and antiques), ownership rates fell a bit between 1995 and 1998. The decline was spread across most of the demographic groups. In contrast, the median value of holdings for those who had such assets rose slightly. Although patterns of change in median holdings were varied across groups, the median grew strongly for the 55-or-older and self-employed groups and families in the top quarter of the net worth distribution.

21. Among homeowners, mean and median equity in a primary residence—that is, the difference between the market value of the property and the amounts outstanding on any debt secured by the property—also rose over the 1995–98 period: The median increased from $53,100 in 1995 to $57,000 in 1998, while the mean jumped from $78,300 to $87,400.

22. The forms of business in this category are sole proprietorships, limited partnerships, other types of partnerships, subchapter S corporations, other types of corporations that are not publicly traded, and other types of private businesses.

9. Family holdings of unrealized capital gains, by selected characteristics of families, 1989, 1992, 1995, and 1998 surveys
Thousands of 1998 dollars

Family characteristic	1989		1992		1995		1998	
	Median	Mean	Median	Mean	Median	Mean	Median	Mean
All families	**12.7**	**91.5**	**8.6**	**79.8**	**6.3**	**71.8**	**10.8**	**96.3**
Income (1998 dollars)								
Less than 10,000	†	11.9	†	15.3	†	16.5	†	16.0
10,000–24,999	†	30.1	.6	28.4	†	25.7	†	26.6
25,000–49,999	12.7	55.3	6.9	49.4	5.3	37.6	10.0	46.9
50,000–99,999	38.2	89.0	27.4	85.8	26.1	69.3	27.0	80.8
100,000 or more	159.0	531.5	134.7	490.7	81.3	493.8	105.3	629.2
Age of head (years)								
Less than 35	†	20.6	†	15.4	†	10.1	†	15.4
35–44	14.1	68.6	5.7	62.2	4.2	38.8	7.1	63.3
45–54	40.7	132.3	20.6	117.9	19.8	101.3	22.4	125.6
55–64	38.2	160.7	33.1	150.1	30.8	145.7	35.6	185.8
65–74	33.7	139.5	34.3	123.9	31.9	125.5	46.5	163.5
75 or more	21.5	126.2	28.9	75.8	34.7	91.3	36.0	114.7

NOTE. See note to table 1.
† Less than $50.

Unrealized Capital Gains

Changes in the values of assets such as businesses, real estate, and stocks are a key determinant of changes in family net worth. Unrealized gains are increases in the value of assets that are yet to be sold. To obtain information on this part of net worth, the survey asks about changes in value from the time of purchase for certain key assets—the primary residence, other real estate, businesses, publicly traded stock, and mutual funds.[23] Driven by the appreciation of residential real estate and especially by the strong rise in the stock market, the median unrealized capital gain rose 71.4 percent between 1995 and 1998, while the mean moved up 34.1 percent (table 9). The mean in 1998 was above its value in 1989, whereas the median was a bit below its 1989 level.

LIABILITIES

The substantial growth in family assets from 1995 to 1998 was accompanied by substantial growth in family debt. The growth in assets was somewhat faster, however, producing a slight decline in the ratio of family debts to assets (the leverage ratio), from 14.7 percent in 1995 to 14.4 percent in 1998 (table 10). But the movement in the ratio reversed only part of the upward trend observed from 1989 to 1995.

23. The survey does not collect information on capital gains for every asset. Most notably, it does not collect such information for retirement accounts.

Families' Holdings of Debt

From 1995 to 1998, the overall proportion of families with any sort of debt inched down from 74.5 percent to 74.1 percent (table 11). Nonetheless, the 1998 level remained above the 73.0 percent figure registered in 1989. Among families with debt, the median amount of debt outstanding rose 42.3 percent from 1995 to 1998, and in 1998 stood 73.3 percent above its level in 1989.

In all the surveys, the prevalence of debt rises with income through the $99,999 mark and then drops off. In contrast, the median amount of debt among those with debt rises continuously across income groups, probably because of borrowing associated with the acquisition of nonfinancial assets by higher-income groups. Across age groups, the proportion of families with debt rises relatively slowly up to about age 45 and then declines; the median shows a similar pattern. The drop-off in debt for older families is driven by the paying off of mortgages on primary residences.

10. Amount of debt of all families, distributed by type of debt, 1989, 1992, 1995, and 1998 surveys
Percent

Type of debt	1989	1992	1995	1998
Home-secured debt	69.4	72.5	73.3	71.9
Other residential property	7.6	10.0	7.5	7.4
Installment loans	16.6	11.3	11.8	12.8
Other lines of credit	1.4	.7	.6	.3
Credit card balances	2.8	3.2	3.9	3.8
Other	2.2	2.3	2.8	3.7
Total	100	100	100	100
MEMO				
Debt as a percentage of total assets	12.4	14.6	14.7	14.4

NOTE. See note to table 1.

11. Family holdings of debt, by selected characteristics of families and type of debt, 1995 and 1998 surveys

A. 1995 Survey of Consumer Finances

Family characteristic	Home-secured	Other residential property	Installment loans	Other lines of credit	Credit card balances	Other	Any debt
	Percentage of families holding debt						
All families	**41.0**	**4.7**	**45.9**	**1.9**	**47.3**	**8.5**	**74.5**
Income (1998 dollars)							
Less than 10,000	9.0	1.6	25.1	*	23.9	6.1	47.2
10,000–24,999	23.9	1.3	38.9	*	41.2	8.1	65.8
25,000–49,999	44.9	3.9	53.7	2.2	54.5	8.7	82.2
50,000–99,999	67.6	7.0	60.0	3.1	62.8	8.6	89.4
100,000 or more	72.7	19.7	39.7	4.6	41.2	13.5	85.3
Age of head (years)							
Less than 35	33.0	2.1	62.5	2.7	54.7	7.4	83.5
35–44	54.3	4.9	59.7	2.1	55.9	10.5	86.9
45–54	61.8	8.4	53.3	2.2	56.4	13.0	86.3
55–64	45.2	8.3	34.8	1.7	43.2	7.8	73.7
65–74	24.7	3.5	16.5	1.3	30.5	5.4	53.4
75 or more	6.8	1.0	8.8	*	17.5	2.9	28.4
Race or ethnicity of respondent							
White non-Hispanic	44.1	5.0	46.1	2.1	47.1	8.5	75.3
Nonwhite or Hispanic	30.2	3.5	45.3	*	48.0	8.5	71.6
Current work status of head							
Working for someone else	51.2	5.4	58.6	2.3	58.0	9.9	87.4
Self-employed	51.6	8.1	45.3	3.6	45.3	8.8	80.9
Retired	18.7	2.4	18.0	*	25.8	4.6	44.8
Other not working	18.2	*	40.8	*	36.8	9.6	63.2
Housing status							
Owner	63.3	5.8	45.4	1.5	51.1	8.0	79.6
Renter or other	...	2.7	46.9	2.6	40.3	9.4	65.2
Percentiles of net worth							
Less than 25	9.6	*	48.9	2.4	41.4	9.6	66.7
25–49.9	47.3	2.5	55.0	2.2	55.5	9.4	81.4
50–74.9	55.6	3.4	47.0	1.2	57.3	7.0	79.3
75–89.9	49.5	8.0	36.2	*	39.5	8.1	70.5
90–100	54.4	18.6	27.9	3.2	27.9	7.4	70.8
	Median value of holdings for families holding debt (thousands of 1998 dollars)						
All families	**54.9**	**31.9**	**6.4**	**3.7**	**1.6**	**2.1**	**23.4**
Income (1998 dollars)							
Less than 10,000	19.1	10.6	2.7	*	.6	2.1	2.2
10,000–24,999	29.7	19.1	3.8	*	1.3	1.2	8.4
25,000–49,999	45.7	29.7	6.9	3.2	1.6	1.8	21.6
50,000–99,999	69.2	33.8	9.5	2.3	2.1	3.7	64.1
100,000 or more	105.2	42.5	9.1	5.3	2.7	7.4	114.8
Age of head (years)							
Less than 35	65.9	26.6	7.5	1.5	1.4	1.6	16.1
35–44	64.8	33.8	5.9	2.1	2.0	2.1	40.0
45–54	53.1	31.9	7.6	6.4	2.1	3.2	42.4
55–64	39.3	35.1	5.3	3.6	1.4	4.2	22.4
65–74	20.2	35.1	5.2	4.0	.9	2.1	7.4
75 or more	19.3	8.5	3.6	*	.4	4.2	2.0
Race or ethnicity of respondent							
White non-Hispanic	57.4	35.1	6.9	4.0	1.6	2.7	28.6
Nonwhite or Hispanic	42.0	26.6	5.2	*	1.3	1.6	11.2
Current work status of head							
Working for someone else	59.5	30.8	7.3	2.6	1.7	2.1	30.8
Self-employed	65.9	44.6	6.4	7.4	2.7	5.3	44.1
Retired	24.4	35.1	4.3	*	.9	3.2	6.4
Other not working	47.8	*	5.2	*	.9	1.6	8.2
Housing status							
Owner	54.9	31.9	7.3	5.1	1.6	3.2	48.8
Renter or other	...	52.0	5.3	1.5	1.3	1.6	5.1
Percentiles of net worth							
Less than 25	49.8	*	5.6	2.8	1.7	1.6	6.6
25–49.9	47.8	20.2	6.4	3.2	1.4	1.7	22.5
50–74.9	55.8	26.6	6.2	2.4	1.6	2.1	39.1
75–89.9	53.1	27.9	7.6	*	1.5	3.2	37.9
90–100	81.8	63.2	8.3	8.5	1.5	8.5	80.0

11.—Continued

B. 1998 Survey of Consumer Finances

Family characteristic	Home-secured	Other residential property	Installment loans	Other lines of credit	Credit card balances	Other	Any debt
	Percentage of families holding debt						
All families	**43.1**	**5.1**	**43.7**	**2.3**	**44.1**	**8.8**	**74.1**
Income (1998 dollars)							
Less than 10,000	8.3	*	25.7	*	20.6	3.6	41.7
10,000–24,999	21.3	1.8	34.4	1.2	37.9	7.0	63.7
25,000–49,999	43.7	4.1	50.0	2.9	49.9	7.7	79.6
50,000–99,999	71.0	7.7	55.0	3.3	56.7	12.2	89.4
100,000 or more	73.4	16.4	43.2	2.6	40.4	14.8	87.8
Age of head (years)							
Less than 35	33.2	2.0	60.0	2.4	50.7	9.6	81.2
35–44	58.7	6.7	53.3	3.6	51.3	11.4	87.6
45–54	58.8	6.7	51.2	3.6	52.5	11.1	87.0
55–64	49.4	7.8	37.9	1.6	45.7	8.3	76.4
65–74	26.0	5.1	20.2	*	29.2	4.1	51.4
75 or more	11.5	1.8	4.2	*	11.2	2.0	24.6
Race or ethnicity of respondent							
White non-Hispanic	46.7	5.4	44.3	2.4	44.4	8.8	74.9
Nonwhite or Hispanic	30.7	4.0	41.6	1.9	43.3	8.8	71.1
Current work status of head							
Working for someone else	50.8	5.2	55.2	2.7	53.5	10.8	86.8
Self-employed	63.1	10.7	46.3	3.7	47.5	10.7	84.6
Retired	18.6	3.1	15.8	*	20.9	3.3	39.9
Other not working	26.8	*	39.0	*	39.0	7.5	65.7
Housing status							
Owner	65.1	6.2	44.3	1.8	46.2	9.3	79.4
Renter or other	...	2.9	42.6	3.4	40.0	7.8	63.5
Percentiles of net worth							
Less than 25	11.3	*	47.1	2.8	39.5	9.3	65.5
25–49.9	47.2	3.2	50.0	2.5	54.8	9.2	81.5
50–74.9	56.2	4.8	46.4	1.7	48.7	7.7	76.8
75–89.9	57.0	8.9	34.3	1.9	36.9	7.6	70.2
90–100	58.9	14.8	27.2	2.6	28.2	10.8	75.9
	Median value of holdings for families holding debt (thousands of 1998 dollars)						
All families	**62.0**	**40.0**	**8.7**	**2.5**	**1.7**	**3.0**	**33.3**
Income (1998 dollars)							
Less than 10,000	16.0	*	4.0	*	1.1	.6	4.1
10,000–24,999	34.2	34.0	6.0	1.1	1.0	1.3	8.0
25,000–49,999	47.0	20.0	8.0	3.0	1.9	2.2	27.1
50,000–99,999	75.0	42.0	11.3	2.8	2.4	3.8	75.0
100,000 or more	123.8	60.0	15.4	5.0	3.2	10.0	135.4
Age of head (years)							
Less than 35	71.0	55.0	9.1	1.0	1.5	1.7	19.2
35–44	70.0	40.0	7.7	1.4	2.0	3.0	55.7
45–54	68.8	40.0	10.0	3.0	1.8	5.0	48.4
55–64	49.4	41.0	8.3	4.9	2.0	5.0	34.6
65–74	29.0	56.0	6.5	*	1.1	4.5	11.9
75 or more	21.2	29.8	8.9	*	.7	1.7	8.0
Race or ethnicity of respondent							
White non-Hispanic	62.0	42.6	9.0	2.8	2.0	3.3	40.0
Nonwhite or Hispanic	62.0	30.0	7.2	0.7	1.1	1.7	15.3
Current work status of head							
Working for someone else	66.0	37.0	8.8	2.8	2.0	3.0	35.5
Self-employed	74.0	54.0	11.0	3.8	2.0	6.5	67.9
Retired	37.0	34.0	5.8	*	1.0	1.9	10.2
Other not working	57.0	*	6.7	*	1.2	1.1	12.6
Housing status							
Owner	62.0	42.6	9.5	2.2	2.0	4.0	60.9
Renter or other	...	27.5	7.7	2.8	1.3	1.3	6.0
Percentiles of net worth							
Less than 25	56.5	*	8.0	1.0	1.6	1.5	8.4
25–49.9	55.0	29.0	7.8	3.0	1.7	2.0	28.4
50–74.9	59.0	22.0	8.9	3.0	1.8	5.0	46.2
75–89.9	72.0	54.0	10.1	1.3	1.5	6.0	67.4
90–100	100.0	72.0	14.7	10.0	2.0	20.0	98.0

NOTE. See note to table 1. * Ten or fewer observations. . . . Not applicable.

Between 1995 and 1998, changes in the proportion of families in different demographic groups holding debt were mixed. Although the proportion declined in most groups, increases were appreciable for families with incomes of $100,000 or more, for the 55-to-64 age group, and for families headed by the self-employed. The median amount of debt increased for most of the demographic groups, and many of the changes were large.

Mortgages and Other Home Equity Borrowing on the Primary Residence

Home-secured debt (first and second mortgages and home equity loans and lines of credit secured by the primary residence) declined slightly as a share of total family debt between 1995 and 1998 (table 10). Nonetheless, the proportion of families with such debt rose over the period, from 41.0 percent to 43.1 percent (table 11), a level substantially above the 40.0 percent registered in 1989.[24] The proportion of families holding such debt rose for most groups in the 1995–98 period. Increases were particularly notable for families headed by the self-employed and for families in the top quarter of the net worth distribution.

While home purchase continues to be the main purpose of home-secured debt, the use of such borrowing for other purposes has become increasingly important since the Tax Reform Act of 1986, which phased out the deductibility of interest payments on most debt other than that secured by the primary residence. Moreover, declining interest rates during most of 1998 strengthened families' incentives that year to refinance existing mortgages and, by refinancing for more than the existing balance, use the opportunity to obtain funds for other purposes.

For families with home-secured debt, the median amount of home-secured debt moved up 12.9 percent over the recent three-year period, while the median value of primary residences rose 5.4 percent for this group. Taken together with the fact that the share of families with home-secured debt rose by more than the share who were homeowners, this result suggests that many families may have been using such borrowing to extract equity from their homes. The median amount of home-secured debt rose for almost every group, with the increases especially marked among the top income and net worth groups. The proportion of families in the nonwhite or Hispanic group borrowing against a primary residence remained 16 percentage points below that of other families; however, the median level of borrowing by the nonwhite or Hispanic group jumped to the level of the other families in 1998.

For home equity lines of credit, the amount included in home-secured debt is only the balance outstanding at the time of the interview. The use of home equity credit lines has expanded since 1995, when 5.1 percent of families had a line and 56.0 percent of those families were drawing funds on it; in 1998 the figures were 7.0 percent with lines and 63.7 percent drawing on them (not shown in table).

Borrowing on Other Residential Real Estate

Across income and net worth groups, borrowing for other residential real estate is most prevalent in all the surveys among families at the upper ends of the distributions. While the overall proportion of families having this type of debt rose slightly from 1995 to 1998, the shares of families in the top income and net worth groups having such debt fell distinctly. At the same time, for those having this type of debt, the median amount owed rose in almost every demographic group.

Installment Borrowing

Although the share of installment borrowing in total family debt rose 1.0 percentage point between 1995 and 1998, its prevalence dropped 2.2 percentage points, to 43.7 percent; the prevalence of such borrowing stood at 49.4 percent in 1989.[25] Over the recent three-year period, the prevalence declined for all income groups except the top and bottom and for all age groups except those between 55 and 74. At least some of the decline is attributable to the substitution of other types of borrowing and to the growth of vehicle leasing.

Over the same period, for those with installment loans the median amount owed on such loans climbed 36.0 percent, to $8,700. The median rose for most demographic groups, with pronounced increases for families with incomes of $100,000 or more, for families headed by those aged 75 or older and retirees, and for the wealthiest 10 percent of families.

24. In 1998, 65.1 percent of homeowners had some type of home-secured debt.

25. The term "installment borrowing" in this article describes consumer loans that typically have fixed payments and a fixed term. Examples are automobile loans, student loans, and loans for furniture, appliances, and other durable consumer goods.

Borrowing on Other Lines of Credit

The use of personal lines of credit other than home equity lines rebounded slightly from 1995 to 1998. Still, only 2.3 percent of families used such debt in 1998, and usage was similarly thin across demographic groups.[26] At the same time, among those borrowers the median amount borrowed declined 32.4 percent, with mixed changes across family groups.

Credit Card Borrowing

The proportion of families that had an outstanding balance on any of their credit cards after paying their most recent bills dropped 3.2 percentage points from 1995 to 1998, to 44.1 percent.[27] The decline was shared by all of the demographic groups except for families headed by those aged 55 to 64, by the self-employed, and by those neither working nor retired and families in the highest net worth group.

Among families having balances outstanding on any of their credit cards, the median total balances owed by the family hardly changed over the period, standing at $1,700 in 1998. Nonetheless, increases were much more common than declines across the demographic groups.

Bank-type cards are the most widely held and most widely accepted credit cards. In 1998, 67.6 percent of families had a bank-type card—up from 66.5 percent in 1995 (not shown in table). Of families with such cards, the share carrying a balance edged down a bit, from 56.0 percent in 1995 to 54.8 percent in 1998; this result suggests some increase in the relative importance of convenience use of bank-type cards over the period (that is, use in which the balance is paid in full each month).

Among families with bank-type cards, the median total credit limit on all their bank-type cards rose from $8,700 in 1995 to $10,000 in 1998. Among families with balances on their cards, the median limits were somewhat lower, at $8,000 in 1995 and $9,500 in 1998; the median fraction of the available credit limit used by this group was about 28 percent in 1998, up slightly from 24 percent in 1995. The survey asks for the interest rate paid on the card on which the family has the largest balance, or on the newest card for families without balances. In both 1995 and 1998, the median interest rate reported was 15 percent; the result is nearly the same if attention is restricted only to families borrowing on their cards.

Other Debt

Other borrowing (loans on insurance policies, loans against pension accounts, borrowing on a margin account, and unclassified loans) was slightly more prevalent in 1998 than in 1995. Increases and decreases were scattered across the demographic groups. At the same time, for borrowers, the median amount of other debt owed rose from $2,100 to $3,000. On a percentage basis, most of the changes across the demographic groups were sizable. The increase in the amount of borrowing was driven by somewhat greater borrowing against pension accounts and cash value life insurance; while the share of families reporting balances outstanding on margin loans ticked up from 0.2 percent in 1995 to 0.8 percent in 1998, the median amount of such loans actually slipped a bit over the period.

Reasons for Borrowing

The SCF provides detailed information on the reasons that families borrow money (table 12).[28] One subtle problem with the use of these data is that, even though money is borrowed for a particular purpose, it may be used to offset some other use of funds. For example, a family may have sufficient assets to purchase a home without using a mortgage but may instead choose to finance the purchase to free existing funds for another purpose. Thus, trends in the data can be only suggestive of the underlying use of funds by families.

The survey shows that the proportion of total borrowing directly attributable to home purchase fell 2.3 percentage points between 1995 and 1998, although the 68.1 percent level seen in 1998 was still above that observed in 1989 or 1992. Almost offset-

26. In 1998, another 0.9 percent of all families had such credit lines available but had no outstanding balance at the time of the interview.

27. The debt could have been on bank-type cards (such as Visa, Mastercard, Discover, and Optima), store and gasoline company cards, so-called travel and entertainment cards (such as American Express and Diners Club), and other credit cards.

28. The survey does not collect exhaustive detail on the uses of borrowed funds. In the case of credit cards, it was deemed impractical to ask about the purposes of borrowing. For the analysis here, credit card debt is included in the category "goods and services." In the case of first mortgages taken out when a property was obtained, it was assumed that the funds were used for the purchase of the home. The surveys before 1995 did not collect information on the use of funds from refinancing a first mortgage; in the table, such borrowing is attributed to home purchase in all the years shown. The surveys before 1998 did not collect information on the uses of funds borrowed from pension accounts; the table reports borrowing from pension accounts as a separate category, unclassified as to purpose.

12. Amount of debt of all families, distributed by purpose of debt, 1989, 1992, 1995, and 1998 surveys
Percent

Purpose of debt	1989	1992	1995	1998
Home purchase	63.5	67.4	70.4	68.1
Home improvement	2.5	2.5	2.0	2.0
Other residential property	9.8	10.8	8.2	7.8
Investments, excluding real estate	3.8	1.8	1.0	3.2
Vehicles	10.4	7.0	7.5	7.5
Goods and services	5.9	5.6	5.7	6.0
Education	2.3	2.8	2.7	3.4
Unclassifiable loans against pension accounts	.2	.1	.2	.4
Other	1.5	2.1	2.2	1.5
Total	100	100	100	100

NOTE. See note to table 1.

13. Amount of debt of all families, distributed by type of lending institution, 1989, 1992, 1995, and 1998 surveys
Percent

Type of institution	1989	1992	1995	1998
Commercial bank	28.2	33.3	35.1	32.6
Savings and loan or savings bank	26.1	16.8	10.8	9.6
Credit union	4.0	4.0	4.5	4.2
Finance or loan company	3.7	3.2	3.2	4.2
Brokerage	2.2	3.1	1.9	3.7
Mortgage or real estate lender	21.2	27.1	32.7	35.9
Individual lender	6.8	4.3	5.0	3.4
Other nonfinancial	1.6	1.6	.8	1.3
Government	2.0	2.0	1.3	.6
Credit card and store card	2.8	3.3	3.9	3.8
Pension account	.2	.1	.2	.4
Other	1.1	1.1	.7	.3
Total	100	100	100	100

NOTE. See note to table 1.

ting this decline was an increase in borrowing for investment purposes; in light of the rising stock market and strong business conditions, some of this borrowing may include borrowing to invest in equities or to start a new business. The shares of borrowing for education, borrowing for purchases of goods and services, and borrowing from pension accounts all rose. Borrowing for other residential real estate and for miscellaneous purposes both declined.

First mortgages on primary residences may be used to purchase a home or to extract equity for other purposes. Borrowing for the initial home purchase accounts for the great majority of debt owed on first mortgages. However, in 1998 approximately 41 percent of all families with first mortgages had refinanced their home at some time, and 26.1 percent of them had extracted some of their home equity (not shown in table). Among families that removed some equity when they refinanced, the major uses reported for the funds were home improvements or repairs (43.1 percent), payment of bills or bill consolidation (20.8 percent), investments (7.8 percent), education (6.4 percent), and vehicle purchases (4.5 percent).

Choice of Lenders

Reflecting ongoing changes in markets for financial services, the mix of institutions that families used for borrowing shifted markedly (table 13). Continuing a secular decline, the share of family borrowing attrib-

14. Ratio of debt payments to family income, share of debtors with ratio above 40 percent, and share of debtors with any payment sixty days or more past due, by selected family characteristics, 1989, 1992, 1995, and 1998 surveys
Percent

Family characteristic	Aggregate				Median			
	1989	1992	1995	1998	1989	1992	1995	1998
All families	**12.7**	**14.1**	**13.6**	**14.5**	**15.9**	**16.1**	**16.1**	**17.6**
Income (1998 dollars)								
Less than 10,000	16.2	16.8	19.5	19.4	23.0	19.5	15.4	20.3
10,000–24,999	12.5	14.8	16.1	16.2	16.4	15.3	17.7	17.8
25,000–49,999	16.0	16.5	16.2	17.4	16.1	16.3	16.6	18.1
50,000–99,999	16.5	15.3	16.0	17.4	16.2	17.0	16.9	18.3
100,000 or more	8.0	10.7	8.7	10.0	11.8	13.7	11.1	13.1
Age of head (years)								
Less than 35	18.0	16.5	17.1	16.6	17.3	16.6	16.9	17.4
35–44	16.7	17.8	16.6	17.0	17.9	19.0	18.1	19.4
45–54	12.2	14.6	14.6	16.3	16.2	16.1	16.6	17.8
55–64	9.0	11.4	11.5	12.9	12.6	14.5	14.0	16.7
65–74	5.5	7.8	6.9	8.5	11.1	10.6	12.2	13.9
75 and more	2.1	3.4	2.9	3.9	9.8	5.0	3.4	8.9
Percentiles of net worth								
Less than 25	11.5	10.9	12.5	14.0	11.2	10.6	12.1	14.5
25–49.9	16.0	17.1	17.9	19.0	16.9	19.0	18.6	19.0
50–74.9	17.8	17.8	17.3	17.7	18.5	18.3	18.3	19.7
75–89.9	14.6	14.3	13.5	14.4	15.2	16.0	15.3	17.6
90–100	7.3	10.5	9.1	10.3	12.2	14.0	13.3	14.5

utable to savings and loan institutions and savings banks moved down 1.2 percentage points from 1995 to 1998. After rising in earlier surveys, the share of lending attributable to commercial banks also declined, by 2.5 percentage points over the period. The share of families' debts held by mortgage and real estate lenders rose 3.2 percentage points, the share held by finance companies ticked up by 1 percentage point, and the share held by brokerages moved up 1.8 percentage points.[29] The shares of other nonfinancial lenders and of pension accounts also rose. At the same time, the importance of lending by credit unions, individuals, government, credit card lenders, and other lenders all declined.

Debt Burden

The rise in family indebtedness over the past decade has raised a concern that the debt might become excessively burdensome to families. The ability of families to service their loans is a function of two factors: the terms of the loan payments and the income and assets that families have available to meet those payments. In planning their borrowing, families make assumptions about their future ability to repay the loans. If events are sufficiently contrary to their assumptions, the resulting defaults might induce restraint in spending and a broader pattern of financial distress in the economy.

Interest rates on many types of loans fell somewhat toward the end of the 1995–98 period. Over the three-year period, family income rose broadly, the proportion of families with any type of debt fell slightly, but the median amount owed increased substantially.[30] The net effect of all these movements on the ability of families to service their loans is not immediately obvious.

The ratio of total family debt payments to total family income is a common measure of "debt burden." Most often, this ratio is computed from aggregate data as the ratio of the total debt payments of all families to the total income of all families. Estimates of this ratio constructed from the SCF data rose from 13.6 percent in 1995 to 14.5 percent in 1998 (table 14). This figure surpasses the 14.1 percent level recorded in the 1992 SCF, the previous high point since 1989.

The SCF data can also be used to compute the ratio by demographic group. With the exception of families in the less-than-35 age group, the ratio of payments to income held steady or rose between 1995 and 1998 for every group in the table.[31] The relative size of the increase was particularly notable for families with incomes of $100,000 or more and those in the 65-or-older age groups.

29. In this analysis, the mortgages reported to be held by finance companies are classified with mortgage and real estate lenders.

30. As noted above, the SCF measures before-tax cash family income for the calendar year preceding the survey.

31. If the calculation of the ratio is limited to families that actually had debt, the results show very similar patterns of change between 1995 and 1998.

14.—Continued

Percent

Family characteristic	Ratio above 40 percent				Any payment sixty days or more past due			
	1989	1992	1995	1998	1989	1992	1995	1998
All families	**10.1**	**10.9**	**10.5**	**12.7**	**7.3**	**6.0**	**7.1**	**8.1**
Income (1998 dollars)								
Less than 10,000	28.6	28.4	27.6	32.0	20.9	11.6	8.4	15.1
10,000–24,999	15.0	15.5	17.3	19.9	12.2	9.3	11.3	12.3
25,000–49,999	9.1	9.6	8.0	13.8	4.8	6.3	8.6	9.2
50,000–99,999	4.9	4.4	4.2	5.7	4.5	2.2	2.7	4.5
100,000 or more	1.8	2.2	1.7	2.1	1.2	.5	1.3	1.5
Age of head (years)								
Less than 35	12.7	10.5	11.0	11.8	11.2	8.3	8.7	11.1
35–44	7.8	11.6	9.2	11.6	6.4	6.8	7.7	8.4
45–54	10.9	10.2	10.4	11.6	4.5	5.4	7.4	7.4
55–64	8.6	14.3	14.5	13.9	7.4	4.7	3.2	7.5
65–74	7.7	7.8	7.8	17.5	3.3	1.0	5.3	3.1
75 and more	14.1	8.7	8.9	20.9	1.2	1.8	5.4	1.1
Percentiles of net worth								
Less than 25	7.7	9.6	9.7	11.9	17.7	14.4	14.5	16.2
25–49.9	11.9	11.9	11.1	14.8	7.6	5.5	8.2	9.8
50–74.9	11.1	11.8	10.8	12.5	3.8	3.1	4.4	5.5
75–89.9	10.1	10.1	8.7	11.5	2.2	2.3	2.4	1.0
90–100	7.8	10.0	12.4	11.5	1.6	1.8	.7	2.4

NOTE. See note to table 1.

While the aggregate ratios indicate the trends in debt burdens for families and groups overall, the SCF data also make it possible to look at the ratio of total loan payments to income for typical borrowers. Among families with debt, the median ratio of payments to income stood at 15.9 percent in 1989; in 1992 and 1995 it was only marginally higher, but in 1998 it jumped to 17.6 percent. The median ratio also rose for almost every demographic group. The most striking increases were among families with incomes of less than $10,000 and those in the 75-or-older group.

Although both the aggregate and median measures of debt burden increased over the 1995–98 period, the levels of these ratios were still well below those often considered to be indicative of financial distress for individual borrowers. However, these measures may not fully reflect problems among families with high levels of debt. One indicator of the prevalence of financial distress is the proportion of families whose debt payments represent more than 40 percent of their income. The fraction of such families, which was 10.1 percent in 1989, rose appreciably between 1995 and 1998, from 10.5 percent to 12.7 percent. The measure rose for most demographic groups, with particularly large increases among families with incomes below $50,000 and those in the 65-or-older age groups.

If a family has any sort of debt at the time of the survey, the SCF asks whether any payments have been late by sixty days or more at least once in the preceding year.[32] The data show that the fraction of families with debt who had been late rose from 7.1 percent in 1995 to 8.1 percent in 1998—a high since 1989. Over the three-year period, the proportion rose notably in the under-$10,000 income group and the 55–64 age group and decreased in the oldest two age groups.

SUMMARY

Between 1995 and 1998, the mean and median net worth of U.S. families rose considerably. These measures of net worth rose for most of the demographic groups considered in the article, but they declined for a few groups. Underlying the rise in net worth was wider ownership of many types of assets combined with higher valuations in key asset markets and a lesser rise in levels of indebtedness.

Ownership of primary residences and retirement accounts increased notably between 1995 and 1998. In addition, the proportion of families owning publicly traded stocks (either directly or through mutual funds, retirement accounts, or other managed assets) jumped more than 8 percentage points, with substantial gains across income and age groups. For some demographic groups, increased ownership of assets corresponded to declines in median holdings, most likely because the "new" holders of these assets had relatively small amounts.

The proportion of families with debt declined slightly over the period, but the median amount owed jumped more than 42 percent. The median amount of mortgage debt grew strongly, although the overall fraction of debt accounted for by mortgages declined. On net, the ratio of debts to assets for all families declined a bit. However, some indicators of debt burden, such as the median ratio of debt payments to income among debtors, showed substantial increases.

Increases in overall mean and median income were less dramatic than those for net worth, but for the first time since their low points observed in the 1992 SCF, the mean and median pushed above their 1989 levels. At least some part of the recent increases must be attributable to capital gains from the sale of assets. However, the 2.5 percentage point drop in the fraction of families with incomes below $10,000 suggests that improved employment and earnings for some families were also key factors.

APPENDIX: SURVEY PROCEDURES AND STATISTICAL MEASURES

The 1998 data used here represent the best estimates at the current advanced stage of data processing, but they may differ in some ways from the final version. Data from the 1998 SCF, suitably altered to protect the privacy of respondents, will be available in February 2000 at www.federalreserve.gov/pubs/oss/oss2/98/scf98home.html.

The data used in this article from the 1989, 1992, and 1995 SCFs are derived from the final versions of those surveys. Results reported in this article may differ in some details from results reported earlier either because of additional data processing, revisions to the survey weights, or adjustments for inflation. Further discussion of the methodology

32. The measure of late payments in the SCF differs conceptually from the aggregate delinquency rate in some important respects. Whereas the delinquency rate records late payments on each loan in a given period, the survey asks families whether they have been late or behind in any of their payments during the past year. Thus, for example, a family with three delinquent loans would be counted three times in the aggregate data but only once in the SCF.

underlying the SCF is available at the above web address.

Generally, the survey estimates correspond fairly well to external estimates. Comparisons of SCF estimates with aggregate data from the Federal Reserve flow of funds accounts suggest that when adjustments are made to achieve conceptual comparability, these aggregate estimates and the SCF estimates are usually very close.[33] In general, only medians from the SCF can be compared with those of other surveys because of the special design of the SCF sample.

Definition of Family in the SCF

The definition of "family" used throughout this article differs from that typically used in other government studies. In the SCF, a household unit is divided into a "primary economic unit" (PEU)—the family—and everyone else in the household. The PEU is intended to be the economically dominant single individual or couple (whether married or living together as partners) and all other persons living in the household who are financially dependent on that person or those persons. In other government studies—for example, those of the Bureau of the Census—an individual is not considered a family. In this report, the head of the family is taken to be the central individual in a PEU without a core couple, the male in a mixed-sex core couple of the PEU, or the older person in a same-sex core couple. The term "head" used in this article is an artifact of the organization of the data and implies no judgment about the actual structure of families.

The Sampling Techniques

The survey is expected to provide a core set of data on family assets and liabilities. The major aspects of the sample design that address this requirement have been fixed since 1989. The SCF combines two techniques for random sampling.[34] First, a standard, multistage area-probability sample (a geographically based random sample) is selected to provide good coverage of characteristics, such as home ownership, that are broadly distributed in the population.

Second, a supplemental sample is selected to disproportionately include wealthy families, who hold a disproportionately large share of such thinly held assets as noncorporate businesses and tax-exempt bonds. This sample is drawn from a list of statistical records derived from tax data. These records are made available for this purpose under strict rules governing confidentiality, the rights of potential respondents to refuse participation in the survey, and the types of information that can be made available.

Of the 4,299 completed interviews in the 1995 survey, 2,780 families came from the area-probability sample, and 1,519 were from the list sample; the comparable figures for the 4,309 cases completed in 1998 are 2,813 families from the area-probability sample and 1,496 from the list sample.[35]

The Interviews

Since 1989, only minor changes to the SCF questionnaires have been made, and then only in response to financial innovations or to gather additional information on the structure of family finances. Thus, the information obtained by the survey is highly comparable over this period.

The generosity of families in giving their time for interviews has been crucial to the success of the SCF. In the 1998 SCF, the median interview required about 1¼ hours. However, for some particularly complicated cases, the amount of time needed was substantially more than 2 hours. The role of interviewers in this effort is also critical: Without their dedication and perseverance, the survey would not have been possible.

Data for the 1995 and 1998 surveys were collected by the National Opinion Research Center at the University of Chicago (NORC) between the months of June and December in each of the two years. The great majority of interviews were obtained in-person, although interviewers were allowed to conduct telephone interviews if that was more convenient for the respondent. In both years, interviewers used a program running on laptop computers to administer the survey and collect the data.

The use of computer-assisted personal interviewing (CAPI) has the great advantage of enforcing systematic collection of data across all cases. In the implementation of CAPI for the SCF, the program was tailored to allow the collection of partial informa-

33. For the details of this comparison, see Rochelle L. Antoniewicz, *A Comparison of the Household Sector from the Flow of Funds Accounts and the Survey of Consumer Finances*, Finance and Economics Discussion Series 1996-26 (Board of Governors of the Federal Reserve System, June 1996).

34. For additional technical details, see Kennickell and Woodburn, "Consistent Weight Design."

35. The 1995 SCF represents 99.0 million families, and the 1998 SCF represents 102.6 million families.

tion in the form of ranges whenever a respondent either did not know or did not want to reveal an exact dollar figure.[36]

Response rates differ strongly in the two parts of the SCF sample. In both 1995 and 1998 about 70 percent of households selected into the area-probability sample actually completed interviews. The overall response rate in the list sample was about 35 percent; in the part of the list-sample likely containing the wealthiest families, the response rate was only about 10 percent. Analysis of the data confirms that the tendency to refuse participation is highly correlated with net worth.

Sources of Error

Errors may be introduced into survey results at many stages. Sampling error, the variability expected to occur in estimates based on a sample instead of a census, is a particularly important source of error. Such error may be reduced either by increasing the size of a sample or, as is done in the SCF, by designing the sample to reduce important sources of variability. Sampling error can be estimated, and for this article we use replication methods to do so.

Replication methods draw samples from the set of actual respondents in a way that incorporates the important dimensions of the original sample design. In the SCF, weights were computed for all the cases in each of the selected replicates. For each statistic for which standard errors are reported in this article, the weighted statistic is estimated using the replicate samples, and a measure of the variability of these estimates is combined with a measure of the variability due to imputation (see below) to yield the standard error.[37]

In addition to errors of sampling, interviewers may introduce errors by failing to follow the survey protocol or misunderstanding a respondent's answers. SCF interviewers are given lengthy, project-specific training to minimize such problems. Respondents may introduce error by interpreting a question in a sense different from that intended by the survey. For the SCF, extensive pre-testing of questions and thorough review of the data tends to reduce this source of error.

Nonresponse—either complete nonresponse to the survey or nonresponse to selected items within a survey—may be another important source of error. As noted in more detail below, the SCF uses weighting to adjust for differential nonresponse to the survey. To deal with missing information on individual questions within the interview, the SCF uses statistical methods to impute missing data.[38]

Weighting

To provide a measure of the frequency with which families similar to the sample families could be expected to be found in the population of all families, analysis weights are computed for each case to account for both the systematic properties of the design and for differential patterns of nonresponse. The SCF response rates are low by the standards of other major government surveys. However, unlike other surveys, which almost certainly also have differential nonresponse by wealthy households, the SCF has the means to adjust for such nonresponse. A major part of SCF research is devoted to the evaluation of nonresponse and adjustments for nonresponse in the analysis weights for the survey.[39]

Preparations for the description of the 1998 SCF data included a detailed analysis of the assets and liabilities of families classified by a large number of characteristics. At this stage, it became clear that the 1998 SCF estimates of home ownership rates for nonwhites and Hispanics were substantially understating the levels observed in other surveys, particularly the Current Population Survey (CPS). The CPS was already used in weighting adjustments to benchmark the overall home ownership rate in the SCF. An examination of data from the earlier SCFs indicated problems in other years as well, but the directions of the differences were not consistent.

Because of the importance of SCF data in assessing the financial behavior and well-being of nonwhites and Hispanics, and because of the importance of home ownership as an indicator of key financial relationships, it was decided to add a new adjustment to the SCF weighting design to bring the survey's estimates of home ownership for nonwhites and His-

36. For a review of the SCF experience in the collection of range data, see Arthur B. Kennickell, "Using Range Techniques with CAPI in the 1995 Survey of Consumer Finances" (Board of Governors of the Federal Reserve System, January 1997). Available at www.federalreserve.gov/pubs/oss/oss2/method.html.

37. See Kennickell and Woodburn, "Consistent Weight Design."

38. For a description of the imputation procedures used in the SCF, see Arthur B. Kennickell, "Multiple Imputation in the Survey of Consumer Finances," in *Proceedings of the Section on Business and Economic Statistics* (1998 Annual Meetings of the American Statistical Association, Dallas, August), pp. 11–20.

39. For a description of the weighting methodology, see Kennickell and Woodburn, "Consistent Weight Design."

panics more in line with the CPS estimates.[40] Such adjusted weights were computed for the 1989, 1992, 1995, and 1998 surveys, and these weights were used in all calculations reported in this article. These weights are available in the public version of the SCF data sets as X42001.

40. Details of the adjustments are given in Arthur B. Kennickell, "Revisions to the SCF Weighting Methodology: Accounting for Race/Ethnicity and Homeownership" (Board of Governors of the Federal Reserve System, December 1999). Available at www.federalreserve.gov/pubs/oss/oss2/method.html.

For this article, the weights of a small number of cases have been further adjusted to diminish the possibility that the results reported could be unduly affected by influential observations. Such influential observations were detected using a graphical technique to inspect the weighted distribution of the underlying data. Most of the cases found were holders of an unusual asset or liability or members of demographic groups in which such holdings were rare. These weight adjustments are likely to make the key findings in the article more robust. □

Staff Studies

The staff members of the Board of Governors of the Federal Reserve System and of the Federal Reserve Banks undertake studies that cover a wide range of economic and financial subjects. From time to time the studies that are of general interest are published in the Staff Studies series and summarized in the Federal Reserve Bulletin. *The analyses and conclusions set forth are those of the authors and do not necessarily indicate concurrence by the Board of Governors, by the Federal Reserve Banks, or by members of their staffs.*

Single copies of the full text of each study are available without charge. The titles available are shown under "Staff Studies" in the list of Federal Reserve Board publications at the back of each Bulletin.

STUDY SUMMARY

USING SUBORDINATED DEBT AS AN INSTRUMENT OF MARKET DISCIPLINE

Federal Reserve System Study Group on Subordinated Notes and Debentures

A growing number of observers have proposed using subordinated notes and debentures (SND) as a way of increasing market discipline on banks and banking organizations. Although policy proposals vary, all would mandate that banks subject to the policy must issue and maintain a minimum amount of SND. In recent years, the perceived need for more market discipline has derived primarily from the realization that the increasing size and complexity of the major banking organizations has made the supervisor's job of protecting bank safety and soundness ever more difficult. A second important motivation is the desire to find market-based ways of better insulating the banking system from systemic risk. In light of the ongoing interest in using SND as an instrument of market discipline, in mid-1998 staff of the Federal Reserve System undertook a study of the issues surrounding an SND policy.[1]

The study begins by carefully defining market discipline, discusses the motivation for and theory behind a subordinated debt policy, and presents an extensive summary of existing policy proposals. The study then reviews the economic literature on the potential for SND to exert market discipline on banks and presents a wide range of new evidence acquired by the study group. This includes information gathered from extensive interviews with market participants, new econometric work, and the experience of bank supervisors. The third major section of the study analyzes many characteristics that an SND policy could have, in terms of both their contribution to market discipline and their operational feasibility. These potential characteristics include the types of institutions that should be subject to an SND policy; the amount that should be required; the maturity, optionality, interest rate cap, and other possible features of the debt instrument; the frequency of issuance; and the way a transition period might work. The study also includes appendixes that (1) provide a detailed summary of the study group's interviews with market participants, (2) examine the potential for banks to avoid SND discipline, (3) analyze the potential macroeconomic effects of an SND policy, and (4) review the Argentine experience with implementing a mandatory subordinated debt policy.

Because the overall purpose of the study is to conduct a broad review and evaluation of the issues, no policy conclusions are advanced. However, the overall tone of the study suggests that a properly designed SND policy is operationally feasible and would likely impose significant additional market discipline on the banking institutions to which it applied. In addition, the study makes clear that

1. This study was completed in May 1999, before enactment of the Gramm–Leach–Bliley Act in November 1999. That act requires that the Federal Reserve Board and the U.S. Department of the Treasury conduct a joint study of the feasibility and appropriateness of requiring large insured depository institutions and depository holding companies to hold a portion of their capital in subordinated debt. The joint study must be submitted to the Congress within eighteen months of the date of enactment.

assessment of a policy proposal would be helped greatly by additional research in several areas: for example, the marginal costs and benefits of required SND issuance relative to those of the existing subordinated debt market and the potential costs and benefits of using the existing SND market, along with existing markets for bank equity and other uninsured liabilities, to aid in bank supervisory surveillance activities. □

Industrial Production and Capacity Utilization for November 1999

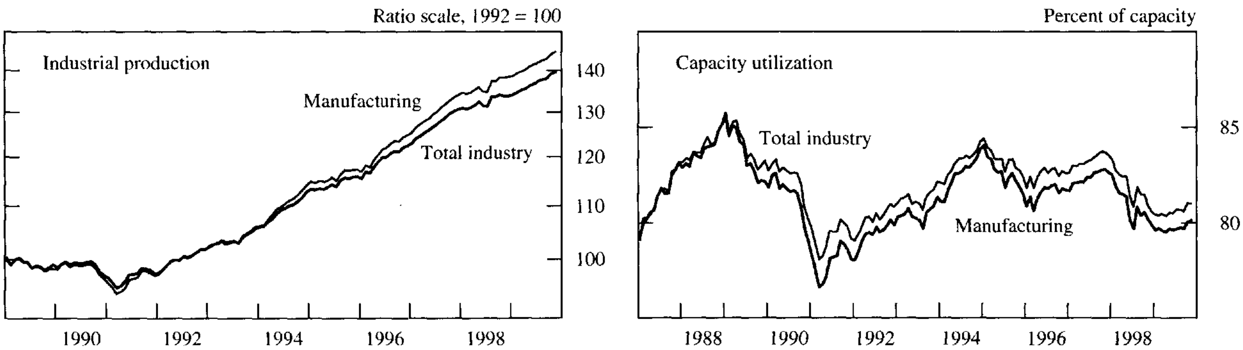
Released for publication December 15

Industrial production advanced 0.3 percent in November after a 0.8 percent increase in October. At 139.5 percent of its 1992 average, industrial production in November was 4.3 percent higher than in November 1998. The rate of capacity utilization for total industry was unchanged at 81.0 percent, a level 1 percentage point below its 1967–98 average.

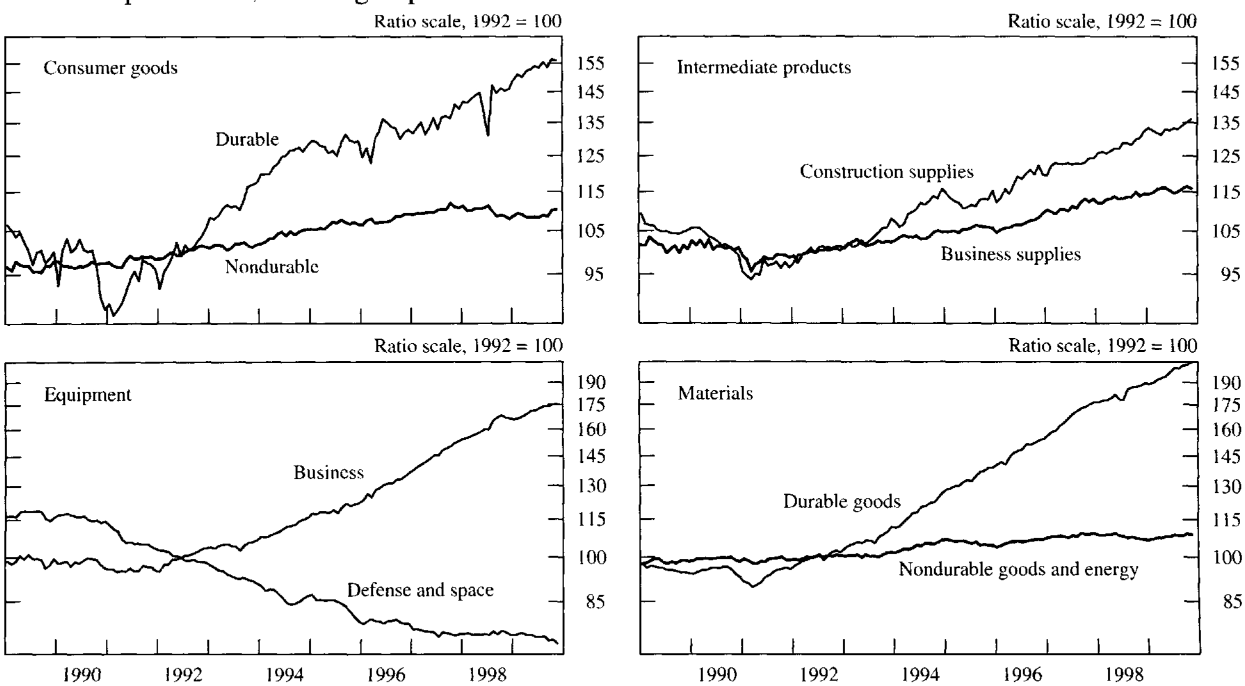
Market Groups

The output of consumer goods ticked up 0.1 percent in November after having risen 1.6 percent in Octo-

Industrial production and capacity utilization



Industrial production, market groups



All series are seasonally adjusted. Latest series, November. Capacity is an index of potential industrial production.

Industrial production and capacity utilization, November 1999

Category	Industrial production, index, 1992=100								
	1999				Percentage change				
					1999[1]				Nov. 1998 to Nov. 1999
	Aug.[r]	Sept.[r]	Oct.[r]	Nov.[p]	Aug.[r]	Sept.[r]	Oct.[r]	Nov.[p]	
Total	**137.7**	**138.0**	**139.1**	**139.5**	**.3**	**.2**	**.8**	**.3**	**4.3**
Previous estimate	137.6	137.6	138.5	. . .	.2	.0	.6	. . .	. . .
Major market groups									
Products, total[2]	127.6	127.5	128.8	129.0	.6	–.1	1.1	.1	3.1
Consumer goods	117.6	116.9	118.8	118.9	.7	–.6	1.6	.1	2.8
Business equipment	173.9	173.8	174.9	175.4	.7	–.1	.6	.3	5.0
Construction supplies	132.9	134.0	135.0	136.0	–.2	.8	.8	.7	4.4
Materials	154.6	155.6	156.3	157.3	–.3	.7	.5	.6	6.3
Major industry groups									
Manufacturing	142.5	142.9	144.0	144.6	.4	.3	.8	.5	4.6
Durable	174.4	174.9	176.1	177.0	.3	.3	.7	.6	7.0
Nondurable	111.5	111.8	112.8	113.2	.4	.2	.9	.3	1.4
Mining	98.5	98.4	99.2	99.9	.8	–.1	.8	.7	–1.5
Utilities	117.8	116.9	119.2	116.4	–1.7	–.8	1.9	–2.3	5.0

Category	Capacity utilization, percent								MEMO Capacity, percentage change, Nov. 1998 to Nov. 1999
	Average, 1967–98	Low, 1982	High, 1988–89	1998	1999				
				Nov.	Aug.[r]	Sept.[r]	Oct.[r]	Nov.[p]	
Total	**82.1**	**71.1**	**85.4**	**80.9**	**80.7**	**80.6**	**81.0**	**81.0**	**4.2**
Previous estimate	. . .	. . .	. . .	. . .	80.6	80.4	80.7	. . .	. . .
Manufacturing	81.1	69.0	85.7	80.2	79.7	79.7	80.0	80.1	4.7
Advanced processing	80.5	70.4	84.2	79.4	78.8	78.7	79.1	79.1	5.6
Primary processing	82.4	66.2	88.9	82.6	82.8	82.8	83.0	83.3	2.4
Mining	87.5	80.3	88.0	84.2	81.9	81.9	82.6	83.2	–.2
Utilities	87.4	75.9	92.6	87.6	92.2	91.4	93.0	90.8	1.4

NOTE. Data seasonally adjusted or calculated from seasonally adjusted monthly data.

1. Change from preceding month.

2. Contains components in addition to those shown.

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ber. The production of durable consumer goods fell 0.3 percent, pulled down by a drop in home appliances and televisions. After having advanced nearly 1½ percent in October, the output of nondurable non-energy consumer goods rose ¾ percent, led by increases in food, tobacco, and consumer chemical production. A 3.6 percent decline in the output of energy products reflected an unusually warm November as well as disruptions at a couple of petroleum refineries.

The production of business equipment increased for a second month; gains in information processing equipment and other equipment offset decreases in industrial and transit equipment. Within the information processing group, the output of computers increased 2.1 percent, a step down from the high rates of growth seen recently. Within the "other equipment" category, farm machinery posted a large increase after having fallen much more sharply during the past spring and summer. The output of transit equipment was once again constrained by a drop in the production of commercial aircraft and parts.

The production of construction supplies rose ¾ percent for the third month in a row, to a level 4½ percent higher than in November 1998. The output of materials increased 0.6 percent, a rise similar to the gains posted in the previous two months. Sizable increases in the production of steel and semiconductors (the output of which has accelerated in the past two months) lifted the production of durable goods materials 1.2 percent in November. The output of nondurable goods materials, which had jumped nearly 1 percent in October, edged up 0.1 percent.

INDUSTRY GROUPS

Manufacturing output rose ½ percent in November after a ¾ percent gain in October. The increase in the output of durables was led by gains at makers of primary metals (particularly iron and steel), motor vehicles and parts, computers, semiconductors, and communications equipment. While most other durable goods industries recorded increases, the output of commercial aircraft and construction machinery declined noticeably. The ongoing contraction in the production of commercial aircraft reduced the output of aerospace and miscellaneous transportation equipment in November to a level about 13 percent below that of November 1998.

Production in nondurable manufacturing increased for a fourth month after earlier weakness; the level of production for nondurable manufacturing is 1.4 percent higher than a year earlier. Among nondurables, food production increased nearly 1 percent for a second month, as did chemicals and products. Losses were posted by the petroleum products, textile, apparel, and printing and publishing industries.

The factory operating rate edged up 0.1 percentage point, to 80.1 percent, the highest level since November 1998. The utilization rate for durable manufacturing was a bit above its 1967–98 average, while the rate for nondurable manufacturing industries was well below its average.

The output at utilities fell 2¼ percent in November; mine production, which was boosted by an increase in oil and gas well drilling, increased for the second straight month.

Revision of Industrial Production and Capacity Utilization

On November 30, 1999, the Federal Reserve Board published a revision to the index of industrial production (IP) and the related measures of capacity and capacity utilization for the period from January 1992 to October 1999. The updated measures reflect both the incorporation of newly available, more comprehensive source data typical of annual revisions and, for some series, the introduction of improved methods for compiling the series. The new source data are for recent years, primarily 1997 and 1998, and the modified methods affect data from 1992 onward. In addition, the supplementary series on the gross value of products leaving the industrial sector are now expressed in 1996 dollars; these series begin in 1977.

The updated IP measures include some annual data from the Census Bureau's *1997 Census of Manufactures* and from selected editions of its *1998 Current Industrial Reports*. Annual data from the U.S. Geological Survey on metallic and nonmetallic minerals (except fuels) for 1997 and 1998 are also introduced. The updating includes revisions to the monthly indicator for each industry (either physical product data, production worker hours, or electric power usage) and revised seasonal factors.

The revision introduced improved measures of production for computers and office equipment (SIC 357) and motor vehicles (SIC 3711, 3). The new monthly measure for computers is derived from detailed information on the major products produced by the industry. For example, from 1994 to 1998, quarterly data on the physical quantity and average unit values of about 1,100 distinct models of personal computers, notebooks, servers, and workstations are used to construct the new IP index for computers; previously, monthly electric power use by the industry was used as the within-year indicator of production. The new measures of motor vehicle production incorporate price weights for the different models of light vehicles; previously, all autos and light trucks were weighted equally in compiling an aggregate figure. In addition, the monthly production indicators for bolts and fasteners (SIC 345) and for metalworking machinery (SIC 354) were changed from electric power use to production worker hours.

Capacity and capacity utilization rates have been revised to incorporate preliminary data from the Census Bureau's *1998 Survey of Plant Capacity*, which covers manufacturing, along with other new data on capacity from the U.S. Geological Survey, the Department of Energy, and other organizations.

The revision is available on the Board's web site, at www.federalreserve.gov/releases/g17, and on diskettes from Publications Services (telephone 202-452-3245). The revised data are also available through the STAT-USA web site of the Department of Commerce (www.stat-usa.gov). Further information on these revisions is available from the Board's Industrial Output Section (telephone 202-452-3197). □

Statement to the Congress

Statement by Richard A. Small, Assistant Director, Division of Banking Supervision and Regulation, Board of Governors of the Federal Reserve System, before the Permanent Subcommittee on Investigations of the Committee on Governmental Affairs, U.S. Senate, November 10, 1999

I am pleased to appear before the Permanent Subcommittee on Investigations to discuss the Federal Reserve's role in the government's efforts to detect and deter money laundering and other financial crimes, particularly as these issues relate to the private banking operations of financial institutions.

You have asked the Federal Reserve to address several matters, including the Federal Reserve's review of private banking activities; the extent to which private banking is vulnerable to money laundering and what private banking activities raise concerns in this regard; the Federal Reserve's experience in obtaining information from U.S. banks that conduct private banking activities outside the United States; and any recommendations or comments the Federal Reserve may have with regard to the strengthening of anti-money-laundering controls for private banking or on pending legislation. You have also asked us to comment on the operations of a specific banking organization. I will address each of these matters; however, I am not at liberty to discuss the activities of any one organization because of the confidentiality of examination findings that must be maintained.

In order to better understand the money laundering issues related to private banking, it would be very useful to first provide you with some background information on what we consider to be private banking and the way in which private banks operate. But first, let me start by stating that, as a bank supervisor, of primary interest to the Federal Reserve is the need to ensure that banking organizations operate in a safe and sound manner and have proper internal control and audit infrastructures to support effective compliance with necessary laws and regulations. A key component of internal controls and procedures is effective anti-money-laundering procedures. Moreover, as part of our examination process, we review the anti-money-laundering policies and procedures adopted by financial institutions to ensure their continued adequacy.

The Federal Reserve places a high priority on participating in the government's efforts designed to attack the laundering of proceeds of illegal activities through our nations's financial institutions. Over the past several years, the Federal Reserve has been actively engaged in these efforts by, among other things, redesigning the Bank Secrecy Act examination process, developing anti-money-laundering guidance, regularly examining the institutions we supervise for compliance with the Bank Secrecy Act and relevant regulations, conducting money laundering investigations, providing expertise to the U.S. law enforcement community for investigation and training initiatives, and providing training to various foreign central banks and government agencies.

Overview of Private Banking

Private banking offers the personal and discrete delivery of a wide variety of financial services and products to the affluent market, primarily high net worth individuals and their corporate interests who generally, on average, have minimum investable assets of $1 million. Customers most often seek out the services of a private bank for issues related to privacy, such as security concerns related to public prominence or family considerations or, in some instances, tax considerations. The private banking relationship is usually managed by a "relationship manager," who is responsible for providing a high degree of personalized service to the customer and for developing and maintaining a strong, long-term banking relationship with that customer.

Private banking accounts can typically be opened in the name of an individual, a commercial business, a law firm, an investment adviser, a trust, a personal investment company, or an offshore mutual fund. A private banking operation usually offers its customers an all-inclusive money management relationship that could include investment portfolio management, financial planning advice, custodial services, funds transfer, lending services, overdraft privileges, hold mail, letter-of-credit financing, and bill paying services. These services, some of which I will describe in some further detail in my testimony, may be performed through a specific department of a commercial bank, an Edge corporation, a nonbank subsidiary, or a branch or agency of a foreign banking organization or in multiple areas of the institution, or such services may be the sole business of an institution.

Private banking services almost always involve a high level of confidentiality regarding customer account information. Consequently, it is not unusual for private bankers to assist their customers in achieving their financial planning, estate planning, and confidentiality goals through offshore vehicles such as personal investment corporations, trusts, or more exotic arrangements, such as mutual funds. Through a financial organization's global network of affiliated entities, private banks often form the offshore vehicles for their customers. These shell companies, which are incorporated in such offshore jurisdictions as the Bahamas, the British Virgin Islands, the Cayman Islands, the Netherlands Antilles, and countries in the South Pacific, such as the Cook Islands, Fiji, Nauru, and Vanuatu, are formed to hold the customer's assets, as well as offer confidentiality because the company, rather than the beneficial owner of the assets, becomes the account holder at the private bank.

A customer's private banking relationship frequently begins with a deposit account and then expands into other products. Many banks require private banking customers to establish a deposit account before opening or maintaining any other accounts. To distinguish private banking accounts from retail accounts, institutions usually require significantly higher minimum account balances and assess higher fees. The customer's transactions, such as wire transfers, check writing, and cash deposits and withdrawals, are conducted through these deposit accounts.

Investment management for private banking customers usually consists of either discretionary accounts in which portfolio managers make the investment decisions based on recommendations from the bank's investment research resources or nondiscretionary accounts in which customers make their own investment decisions. Private banking customers may request extensions of credit. Loans backed by cash collateral or managed assets held by the private banking function are quite common, especially in international private banking. Private banking customers may pledge a wide range of their assets, including cash, mortgages, marketable securities, land, or buildings, to secure their loans.

The Private Banking Industry

As the affluent market grows, both in the United States and globally, competition to serve it has become more intense. Consequently, new entrants in the private banking marketplace include nonbank financial institutions, as well as banks, and the range of private banking products and services continues to grow. A 1997 study estimated the private banking industry at $17 trillion globally and predicted that the private banking industry would grow at two to three times the pace of the overall consumer banking market for the foreseeable future.

Approximately 4,000 financial organizations are competing worldwide in the private banking market with no one organization currently managing more than 2.5 percent of the estimated available business. Private banking has a proven track record of being profitable for banking organizations.

Typically, private banking services are organized as a separate functional entity within the larger corporate structure of a banking organization. As the private banking industry has developed over the past several years, the expectations of the customers have evolved. Historically, clients sought discretion, confidentiality, and asset preservation. This emphasis has shifted as capital restraints have been dismantled, and in some countries, autocratic regimes have been replaced with free market economies.

Today, while confidentiality is still important, investment performance has taken precedence. Private banking customers' portfolios typically now include a greater proportion of equities and sophisticated investment products.

Review of Private Banking Activities

The Federal Reserve has long recognized that private banking facilities, while providing necessary services for a specified group of customers, can, without careful scrutiny, be susceptible to money laundering. In our continuing efforts to provide relevant information and guidance in the area of effective anti-money-laundering policies and procedures for private banking, in 1997, the Federal Reserve published guidance on sound risk-management practices for private banking activities. Besides distributing the guidance to all banking organizations supervised by the Federal Reserve, the guidance was made publicly available through the Federal Reserve's web site. More recently, the Federal Reserve developed enhanced examination guidelines specifically designed to assist examiners in understanding and reviewing private banking activities.

Since 1996, the Federal Reserve has undertaken two significant reviews of private banking. In the fall of 1996, the Federal Reserve Bank of New York began a yearlong cycle of on-site examinations of the risk-management practices of approximately forty banking organizations engaged in private banking activities. Last year, a Private Banking Coordinated Supervisory Exercise by several Reserve Banks and Board staff was undertaken to better understand and assess the current state of risk-management practices at private banks throughout the Federal Reserve System.

The examinations by the Federal Reserve Bank of New York focused principally on assessing each organization's ability to recognize and manage the potential risks, such as credit, market, legal, reputational, or operational, that may be associated with an inadequate knowledge and understanding of its customers' personal and business backgrounds, sources of wealth, and uses of private banking accounts.

These reviews were prompted by the Federal Reserve's desire to enhance its understanding of the risks associated with private banking. We recognized, for example, that some private banking operations may not have been conducting adequate due diligence with regard to their international customers. While all organizations had anti-money-laundering policies and procedures, the implementation and effectiveness of those policies and procedures ranged from exceptional to those that were clearly in need of improvement.

As a result of the examinations of the private banking activities of these organizations, which began in 1996, certain essential elements associated with sound private banking activities were identified. These elements include the need for the following:

- *Senior management oversight* of private banking activities and the creation of an appropriate corporate culture that embraces a sound risk-management and control environment to ensure that organization personnel apply consistent practices, communicate effectively, and assume responsibility and accountability for controls.
- *Due diligence policies and procedures* that require banking organizations to obtain identification and basic information from their customers, understand sources of funds and lines of business, and identify suspicious activity.
- *Management information systems* that provide timely information necessary to analyze and effectively manage the private banking business and to monitor for and report suspicious activity.
- *Adequate segregation of duties* to deter and prevent insider misconduct and such things as unauthorized account activity and unapproved waivers of documentation requirements.

During the course of the examinations, a number of banking organizations were reluctant to release information on the beneficial ownership of personal investment corporations established in recognized secrecy jurisdictions that maintained accounts at the banks. The banks raised concerns regarding the prohibition on disclosure imposed by the laws of the countries in which the personal investment corporations were formed, as well as concerns that such disclosures would lead to customer backlash. However, as the result of continued persistence by Federal Reserve examiners, all banks provided the requested information. Very few customers closed their accounts even after being asked to waive any confidentiality protections that they may have had under foreign law so that the beneficial ownership information could be made available to examiners.

In last year's Coordinated Supervisory Exercise, a sample consisting of the private banking activities of seven banking organizations was reviewed by a Systemwide team of examiners during regularly scheduled safety and soundness examinations. As a result of the examinations, we concluded that the strongest risk-management practices existed at private banks with high-end domestic customers. We found that among private banks with primarily international customers, stronger risk-management practices were in place at those organizations that had a prior history of problems in this area but, as a result of regulatory pressure, had successfully corrected the problems. The weakest risk-management practices were identified at organizations whose private banking activities were only marginally profitable and who were attempting to build a customer base by targeting customers in Latin America and the Caribbean.

This exercise also identified emerging trends in the private banking industry, some of which were the following:

- Established private banking operations maintain strong risk-management controls and strong earnings, in contrast to relatively new entrants that have no specific criteria for seeking customers and tend to have inadequate customer screening procedures.
- New software and hardware products are being introduced into the marketplace that allow for banking organizations to direct products to their custom-

ers, with the byproduct that these systems will allow for more effective identification of potentially suspicious or criminal activity.

Vulnerabilities to Money Laundering

The Federal Reserve has addressed and continues to address perceived vulnerabilities to money laundering in private banking by issuing private banking sound practices guidance and developing targeted examination procedures for private banking, as well as our regular on-site examinations of private banking operations. There are some practices within private banking operations that we believe pose unique vulnerabilities to money laundering and, therefore, require a commitment by the banking organizations to increased awareness and due diligence.

Personal investment corporations that are incorporated primarily in offshore secrecy or tax haven jurisdictions and are easily formed and generally free of tax or government regulation are routinely used to maintain the confidentiality of the beneficial owner of accounts at private banks. Moreover, and of primary interest to the beneficial owners, are the apparent protections afforded the account holders by the secrecy laws of the incorporating jurisdictions. Private banking organizations have at times interpreted the secrecy laws of the foreign jurisdictions in which the personal investment corporations are located as a complete prohibition to disclosing beneficial ownership information. The Federal Reserve, however, has continually insisted that for those accounts that are maintained within the United States, banking organizations must be able to provide evidence that they have sufficient information regarding the beneficial owners of the accounts to appropriately apply sound risk-management and due diligence procedures.

A variant of personal investment corporation accounts that could increase the risk of the accounts being used for money laundering purposes are personal investment corporations that are owned through bearer shares. Bearer shares are negotiable instruments with no record of ownership so that title of the underlying entity is held essentially by anyone who possesses the bearer shares. Historically, bearer shares were used as a vehicle for estate planning in that at death the shares would be passed on to the deceased beneficiaries without the need for probate of the estate. However, in the context of potential illicit activity being conducted through an entity whose ownership is identified by bearer shares, it is virtually impossible for a banking organization to apply sound risk-management procedures, including identifying the beneficial owner of the account, unless the banking organization physically holds the bearer shares in custody for the beneficial owner, which of course we encourage.

The use of omnibus or concentration accounts by private banking customers that seek confidentiality for their transactions poses an increased vulnerability to banking organizations that the transactions could be the movement of illicit proceeds. Omnibus or concentration accounts are a variation of suspense accounts and are legitimately used by banks, among other things, to hold funds temporarily until they can be credited to the proper account. However, such accounts can be used to purposefully break or confuse an audit trail by separating the source of the funds from the intended destination of the funds. This practice effectively prevents the association of the customer's name and account numbers with specific account activity and easily masks unusual transactions and flows that would otherwise be identified for further review.

Much has been said about the use of correspondent accounts in facilitating money laundering transactions. Admittedly, correspondent accounts may raise money laundering concerns because the interbank flow of funds may mask the illicit activities of customers of a bank that is using the correspondent services. However, it is our belief that correspondent banking relationships, if subject to appropriate controls, play an integral role in the financial marketplace by allowing banks to hold deposits and perform banking services, such as check clearing, for other banks. This allows certain banks, especially smaller institutions, to gain access to financial markets on a more cost-effective basis than otherwise may be available.

Foreign Jurisdictions

A primary obstacle to our supervision of offshore private banking activities by U.S. banking organizations, not only with regard to beneficial ownership information but also with regard to the safety and soundness of the operations, is our inability to conduct on-site examinations in many offshore jurisdictions. While it appears that nearly all institutions that we supervise have adequate anti-money-laundering policies and procedures, our examination process is most effective when we have the ability to review and test an organization's policies and procedures. Secrecy laws in some jurisdictions limit or restrict our ability to conduct these on-site reviews or to obtain pertinent information. In such instances, practically our only alternative is to rely on a bank's internal auditors.

A number of offshore jurisdictions are currently preparing for on-site examinations by home country supervisors. This effort is being led in large part by members of the Basle Committee on Banking Supervision and the Offshore Group of Banking Supervisors. A report issued by these groups in 1996 stated,

> While recognizing that there are legitimate reasons for protecting customer privacy . . . secrecy laws should not impede the ability of supervisors to ensure safety and soundness of the international banking system.

Legislative and Regulatory Initiatives

The Federal Reserve has continually supported efforts to better and more effectively attack money laundering activities because of our supervisory interests in establishing policies and procedures thwarting money laundering, as well as our interests in supporting and participating in law enforcement's efforts to detect and deter money laundering. The use of the banking system to launder the proceeds of criminal activity can certainly damage the reputation of the banks involved, as well as have a detrimental impact on the banking sector as a whole.

The proposed "Foreign Money Laundering Deterrence and Anticorruption Act" addresses a number of areas in which current requirements would be strengthened. We note that a number of the provisions of the proposed legislation address similar issues to those set forth in the recently released National Money Laundering Strategy. The Strategy requires a review of a number of critical areas in which the Federal Reserve will be an active participant, and we believe that the results of the reviews will provide information that should be useful to the legislative process.

The Federal Reserve has been contemplating, in cooperation with the banking industry, developing guidance to assist banking organizations in implementing money laundering risk assessments of their customer base. These risk assessments would be used to determine the appropriate due diligence required to identify and, when necessary, report suspicious activity. For example, because of the increased concern that private banking accounts could be used for money laundering, we would expect that guidance in this area would suggest that it may be necessary to engage in a more in-depth analysis of a customer's intended use of the account coupled with a heightened ongoing review of account activity to determine if, in fact, the customer has acted in accordance with the expectations developed at the inception of the relationship. We believe that such policies and procedures will be an effective tool against potential money laundering activity.

The banking system has a significant interest in protecting itself from being used by criminal elements. Individual banking organizations have committed substantial resources and achieved noticeable success in creating operational environments that are designed to protect their institutions from unknowingly doing business with unsavory customers and money launderers. Clearly, these efforts need to continue and the momentum needs to be maintained. I want to emphasize that the Federal Reserve actively supports these efforts. Consequently, we will continue our cooperative efforts with other bank supervisors and the law enforcement community to develop and implement effective anti-money-laundering programs addressing the ever-changing strategies of criminals who attempt to launder their illicit funds through private banking operations, as well as through other components of banking organizations here and abroad. □

Announcements

Action by the Federal Open Market Committee and an Increase in the Discount Rate

The Federal Open Market Committee on November 16, 1999, voted to raise its target for the federal funds rate by 25 basis points to 5½ percent. In a related action, the Board of Governors approved a 25 basis point increase in the discount rate to 5 percent.

Although cost pressures appear generally contained, risks to sustainable growth persist. Despite tentative evidence of a slowing in certain interest-sensitive sectors of the economy and of accelerating productivity, the expansion of activity continues in excess of the economy's growth potential. As a consequence, the pool of available workers willing to take jobs has been drawn down further in recent months, a trend that must eventually be contained if inflationary imbalances are to remain in check and economic expansion continue.

Today's increase in the federal funds rate, together with the policy actions in June and August and the firming of conditions more generally in U.S. financial markets over the course of the year, should markedly diminish the risk of inflation going forward. As a consequence, the directive the Federal Open Market Committee adopted is symmetrical with regard to the outlook for policy over the near term.

In taking the discount rate action, the Federal Reserve Board approved requests submitted by the Boards of Directors of the Federal Reserve Banks of Boston, Cleveland, Richmond, and Kansas City. Subsequently the Board approved similar requests by the board of directors of the Federal Reserve Bank of San Francisco, also effective on November 16; by the boards of directors of the Federal Reserve Banks of Atlanta and Dallas, effective November 17; and by the boards of directors of the Federal Reserve Banks of St. Louis, New York, Philadelphia, Chicago, and Minneapolis, effective November 18. The discount rate is the rate charged depository institutions when they borrow short-term adjustment credit from their District Federal Reserve Banks.

Modifications to the Settlement Finality for ACH Credit Transactions Processed by Federal Reserve Banks

The Federal Reserve Board on November 12, 1999, approved modifications to the settlement finality for automated clearinghouse (ACH) credit transactions processed by the Federal Reserve Banks so that settlement becomes final when posted to depository institutions' accounts. The Board will require prefunding for any ACH credit transactions that settle through a Federal Reserve account that is being monitored in real time to help manage settlement risk.

The Reserve Banks will be modifying their software and their ACH operating circular to implement settlement-day finality. To permit time for these changes, settlement-day finality and prefunding will be implemented in early 2001. A specific implementation date will be announced three months in advance of the effective date.

Adjustment of the Dollar Amount That Triggers Certain Disclosure Requirements under the Truth in Lending Act

The Federal Reserve Board on November 3, 1999, published its annual adjustment of the dollar amount that triggers additional disclosure requirements under the Truth in Lending Act for mortgage loans that bear fees above a certain amount.

The Board has adjusted the dollar amount from $441 for 1999 to $451 for 2000 based on the annual percent change reflected in the consumer price index that was in effect on June 1, 1999. The adjustment is effective January 1, 2000.

The Home Ownership and Equity Protection Act of 1994 bars credit terms such as balloon payments and requires additional disclosures when total points and fees payable by the consumer exceed $400 (to be adjusted annually) or 8 percent of the total loan amount, whichever is larger.

PROPOSED ACTION

The Federal Reserve Board on November 3, 1999, published proposed revisions to the official staff commentary that applies and interprets the requirements of Regulation Z (Truth in Lending). Comments are requested by January 10, 2000.

REVIEW OF PUBLICATIONS ACTIVITIES OF THE FEDERAL RESERVE BOARD

The Federal Reserve Board on November 3, 1999, announced a review of its publications activities. As part of this effort, the Board is seeking public comment on how the Board's publications are individually and collectively meeting information needs and to offer suggestions for improving or possibly eliminating some publications or adding new ones. Comments are requested by December 17, 1999.

SURVEY RESULTS ON CONSUMER CONFIDENCE IN BANKS' Y2K PREPARATIONS

The Federal Reserve Board and the Federal Deposit Insurance Corporation (FDIC) announced on November 18, 1999, the results of a survey by the Gallup Organization. According to the survey, current figures indicate that nine out of ten U.S. bank customers believe that their banks are ready for the Year 2000—or Y2K. By comparison, a March survey found that an estimated 76 percent of bank customers were confident that their banks would solve the Y2K problem.

Both surveys were sponsored by federal financial institution regulatory agencies. The Federal Reserve Board and the FDIC sponsored the current survey, which was delivered to the agencies on November 15, 1999. The results, which are based on about 1,400 completed interviews, are from an ongoing survey of adult Americans who have bank accounts.

"The survey underscores growing consumer confidence that banks are prepared for Y2K and that it will be business as usual for bank customers on January 1, 2000 and thereafter," said FDIC Chairman Donna Tanoue.

The most recent Gallup report indicates that financial institutions have been informing their customers about their Year 2000 readiness. The percentage of American adult depositors who have received information about Y2K readiness from their financial institutions has significantly increased over the past seven months: An estimated 70 percent now report receiving information from their financial institution, compared with 23 percent in March. Additionally, in March, 52 percent of respondents reported having seen or heard a great deal about the Y2K issue, but that percentage is now up to 68 percent.

Only about 5 percent of bank customers currently indicate that they are very concerned about the Y2K issue, down from 11 percent in the March report. The November findings support the notion that a decreased level of concern about the likely effect of the century date change on computers is related to increased information about the Y2K issue. Consumer confidence in their own financial institutions has also increased. More than 90 percent of those surveyed expressed confidence in their own banks, with the proportion of those saying they would definitely or probably take extra cash declining from 62 percent to 39 percent in the period between the March and October surveys. A majority of those who plan to withdraw extra cash say that they will take less than $500.

The survey results also indicate that the public is increasingly confident that basic payment systems will work properly during the century date change. Most American adult depositors believe that they will have access to their money; that checks will continue to be processed accurately; and that automatic teller machines, credit card systems, and electronic direct deposits will function normally.

Edward W. Kelley, Jr., a member of the Board of Governors of the Federal Reserve System stated,

> From the beginning of our preparations for Y2K we said that there were two challenges facing us—the technical challenge and the challenge of public confidence. I believe we've met the technical challenge and these data indicate we've made good progress in ensuring Americans know we are ready for the century rollover.

Over the past three years, FDIC-insured financial institutions have been identifying and overhauling systems to make them Year 2000-ready. At the same time, the regulatory agencies have been closely monitoring their efforts. As of today, the regulators have assigned a "Satisfactory" rating, the highest possible rating, to 99.9 percent of FDIC-insured financial institutions.

Release of a Report on a Survey of Web Site Privacy

The four federal banking agencies (the Federal Reserve Board, the Federal Deposit Insurance Corporation, the Comptroller of the Currency, and the Office of Thrift Supervision) on November 9, 1999, released a report on the results of a survey of Internet privacy policies of banking and thrift institutions.

The survey report, titled *Interagency Financial Institution Web Site Privacy Survey Report*, examined 314 World Wide Web sites selected randomly, plus those of the 50 largest banks and thrift institutions with web sites. Conducted during May and July by the federal agencies that supervise the institutions, the survey examined the collection of consumer information, interactive capabilities, and privacy disclosures at these sites. The purpose of the survey was to provide an indication of the state of the industry with respect to data collection and on-line privacy disclosures.

Overall, 48 percent of the 364 web sites surveyed posted a privacy disclosure—a privacy policy (a comprehensive statement regarding the collection and use of consumer information) or an information practice statement (a statement describing a particular information handling policy or practice, such as data security). Sixty-two percent of web sites that collected personal information provided a privacy disclosure. Sites that collected personal information were three times as likely to post a privacy policy as sites that did not collect personal information. The survey also found that 96 percent of the nation's fifty largest banks and thrifts that are on-line provided a privacy policy or information practice statement.

The agencies began work on the survey in February 1999. The agencies will monitor, as appropriate, the industry's progress in responding to consumer privacy issues and complying with the new legal mandates contained in the financial services reform legislation through regular supervisory activities.

This survey supplements previous web site surveys that did not focus on financial institutions, such as the Federal Trade Commission's "Privacy Online: A Report to Congress" (June 1998), and the Georgetown Internet Privacy Policy Survey "Privacy Online in 1999: A Report to the Federal Trade Commission" (June 1999). Because the sample population and content of the questionnaire used to conduct the interagency survey differ materially from those in the surveys cited, direct comparisons between the results of the various surveys should not be made.

Copies of the survey report are available on the agencies's web sites.

Increase in Adversely Classified Syndicated Bank Loans

The Federal Reserve Board, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency released data on November 10, 1999, on syndicated bank loans rated adversely by examiners. According to the data, syndicated bank loans rated adversely by examiners increased in 1999 from low levels. The agencies released aggregate data for the past six years and data by major industry sector for the past three years.

Under the Shared National Credit (SNC) Program, the agencies review large syndicated loans annually, usually in May and June. The program, established in 1977, is designed to provide an efficient and consistent review and classification of any loan or loan commitment shared by three or more institutions and totaling $20 million or more.

In 1999, the SNC Program covered 8,974 credits to 5,587 borrowers totaling $1.8 trillion in drawn and undrawn loan commitments. Of the total, $37.4 billion, or 2 percent, was classified adversely because of default or other significant credit concerns. That was up from the lowest level this decade, 1.3 percent in 1998, but still significantly below the 4.1 percent level reached in 1994.

Borrowers have drawn down about a third of the $1.8 trillion in loan commitments, or $630 billion. Of this amount, $33 billion, or 5.3 percent, was classified adversely, up from 3.2 percent in 1998 but down from 11 percent in 1994.

The percentage of adversely classified credits rose in 1999 for most major industry sectors compared with 1998. The rise was sharpest for service industries because of a large increase in problem loans in the health-care sector. Other industries recording an increase included oil and gas and wholesale and retail trade.

Credits listed as "special mention" by examiners because of potential weakness—a less serious category than the three adverse classifications: substandard, doubtful, and loss—totaled $31.4 billion in 1999, up from $22.8 billion in 1998 but about the same as in 1994.

Enforcement Actions

The Federal Reserve Board on November 16, 1999, announced the issuance of a consent order against Robert and Adele Barber, both institution-affiliated parties of the First Western Bank, Cooper City, Florida, a state member bank.

The individuals, without admitting to any allegations, consented to the order to resolve allegations that they violated the Change in Bank Control Act in connection with their acquisition of beneficial ownership of the shares of the bank.

The Federal Reserve Board on November 16, 1999, announced the issuance of a consent order against Matthew J. Callahan, an institution-affiliated party of the First Western Bank, Cooper City, Florida, a state member bank.

The individual, without admitting to any allegations, consented to the order to resolve allegations that he violated the Change in Bank Control Act in connection with his acquisition of beneficial ownership of the shares of the bank.

The Federal Reserve Board on November 16, 1999, announced the issuance of a consent order against Bertram Smith, an institution-affiliated party of the First Western Bank, Cooper City, Florida, a state member bank.

The individual, without admitting to any allegations, consented to the order to resolve allegations that he violated the Change in Bank Control Act in connection with his acquisition of beneficial ownership of the shares of the bank.

The Federal Reserve Board on November 16, 1999, announced the execution of a written agreement by and among Heritage Bancorp Company, Inc., Cleveland, Oklahoma; the First Bank of Cleveland, Cleveland, Oklahoma; the Federal Reserve Bank of Kansas City; and the Oklahoma State Banking Department. □

Minutes of the Meeting of the Federal Open Market Committee Held on October 5, 1999

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, October 5, 1999, at 9:00 a.m.

Present:

Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Boehne
Mr. Ferguson
Mr. Gramlich
Mr. Kelley
Mr. McTeer
Mr. Meyer
Mr. Moskow
Mr. Stern

Messrs. Broaddus, Guynn, Jordan, and Parry, Alternate Members of the Federal Open Market Committee

Mr. Hoenig, Ms. Minehan, and Mr. Poole, Presidents of the Federal Reserve Banks of Kansas City, Boston, and St. Louis respectively

Mr. Kohn, Secretary and Economist
Ms. Fox, Assistant Secretary
Mr. Gillum, Assistant Secretary
Mr. Mattingly, General Counsel
Mr. Prell, Economist
Ms. Johnson, Economist

Ms. Cumming, Messrs. Howard, Lang, Lindsey, Rolnick, Rosenblum, Slifman, and Stockton, Associate Economists

Mr. Fisher, Manager, System Open Market Account

Messrs. Ettin and Reinhart, Deputy Directors, Divisions of Research and Statistics and International Finance respectively, Board of Governors

Messrs. Madigan and Simpson, Associate Directors, Divisions of Monetary Affairs and Research and Statistics respectively, Board of Governors

Mr. Whitesell, Assistant Director, Division of Monetary Affairs, Board of Governors

Mr. Kumasaka, Assistant Economist, Division of Monetary Affairs, Board of Governors

Ms. Low, Open Market Secretariat Assistant, Division of Monetary Affairs, Board of Governors

Ms. Browne, Messrs. Eisenbeis, Goodfriend, Kos, Rasche, and Sniderman, Senior Vice Presidents, Federal Reserve Banks of Boston, Atlanta, Richmond, New York, St. Louis, and Cleveland respectively

Messrs. Judd and Sullivan, Vice Presidents, Federal Reserve Banks of San Francisco and Chicago respectively

Mr. Filardo, Assistant Vice President, Federal Reserve Bank of Kansas City

By unanimous vote, the minutes of the meeting of the Federal Open Market Committee held on August 24, 1999, were approved.

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting, and thus no vote was required of the Committee.

The Manager also reported on developments in domestic financial markets and on System open market transactions in government securities and federal agency obligations during the period August 24, 1999, through October 4, 1999. By unanimous vote, the Committee ratified these transactions.

The information reviewed at this meeting suggested that the expansion of economic activity was substantial in the quarter just ended. Consumer spending and business investment in durable equipment remained strong, and inventory investment picked up from the sluggish pace of the second quarter, while residential housing activity showed some signs of deceleration. To meet aggregate demand, industrial production increased further and employment gains continued to be relatively robust, keeping labor markets taut. Inflation was moderate, but somewhat above that in 1998, owing to a sharp rebound in energy prices.

Although private nonfarm payroll employment expanded relatively slowly in August, the slowdown had followed a surge in July, and growth for the two months was very close to the brisk pace of the first half of the year. Job gains in the service-producing sector remained strong in the July–August period, while employment in the goods-producing sector continued to decline, though at a slightly slower rate than earlier in the year. The civilian unemployment rate dropped back to 4.2 percent in August, matching its low for the year.

Industrial production was up appreciably further on balance in July and August. Mining activity rose markedly, utility output increased moderately on balance, and manufacturing production recorded a further sizable advance over the two months. Within manufacturing, high-tech goods and motor vehicles were sources of particular strength, while the production of nondurable goods changed little. The rate of utilization of manufacturing capacity climbed over the two months but remained well below its long-term average.

Total retail sales posted strong gains over July and August. Increases in sales were spread across all major categories, with spending for nondurable goods and motor vehicles notably strong. Expenditures on services rose moderately in the two-month period. There were mixed signals with regard to the housing sector. Construction was at a high level, the inventory of unsold homes remained quite low, and starts of multifamily units rose over the July–August period. However, single-family housing starts edged lower on balance over July and August, and sales of existing homes weakened.

The available information suggested that business capital spending continued to climb rapidly. Shipments of nondefense capital goods posted further large gains in July and August, with outlays for high-tech machinery and transportation equipment particularly strong. In addition, new orders for durable equipment turned up sharply in the two months. Nonresidential construction activity changed little on balance in July as continued strength in the office and an increase in the lodging and miscellaneous categories offset reductions in the industrial and non-office commercial categories.

Manufacturing and trade inventories, outside of motor vehicles, picked up sharply in July after posting a small increase in the first half of the year, but inventories remained lean in relation to sales. In manufacturing, stocks rebounded from a substantial June decline; however, the aggregate stock–shipments ratio remained at the bottom of its range for the past twelve months. Wholesalers also increased their inventories in July; while the inventory–shipments ratio for this sector rose, it was in the low end of its range for the past year. In the retail sector, inventories contracted somewhat in July, and the inventory–sales ratio for this sector also was near the bottom of its range over the past year.

The nominal deficit on U.S. trade in goods and services widened in July from its second-quarter average, with the value of imports rising more than the value of exports. The increase in imports was concentrated in aircraft, consumer goods, industrial supplies, and oil. The step-up in exports occurred primarily in industrial machinery and semiconductors. Among the major foreign industrial countries, the limited available information suggested that economic activity was strengthening in Europe and the United Kingdom in the third quarter while economic indicators for Japan were mixed after the strong advance in the first half of the year. Economic growth in Canada seemed to be continuing at a robust pace, and economic recovery in most of the Asian emerging-market economies was proceeding briskly.

Inflation remained relatively moderate, though somewhat above the pace of 1998 because of a sharp rebound in energy prices. Overall consumer prices increased in July and August at about the second-quarter rate. Abstracting from the sharp advances in energy prices and the mild increases in food prices, consumer inflation continued to be relatively subdued over the two months. In the past twelve months, the core CPI rose less than in the previous twelve-month period. At the producer level, prices of finished goods other than food and energy were essentially unchanged over the two months; moreover, the change in core producer prices in the past year was about the same as in the year-earlier period. At earlier stages of processing, however, producer prices of crude and intermediate materials excluding food and energy had firmed noticeably over recent months. Average hourly earnings continued to grow at a moderate pace over July and August, and the rise over the past year was considerably smaller than that for the year-earlier period.

At its meeting on August 24, 1999, the Committee adopted a directive that called for a slight tightening of conditions in reserve markets consistent with an increase of ¼ percentage point in the federal funds rate to an average of around 5¼ percent. The members noted that this move, together with the firming in June, should help to keep inflation subdued and to promote sustainable economic expansion. The Committee also agreed that the directive should be symmetric. A possible rise in inflation remained the main threat to sustained economic expansion, but it was not anticipated that further tightening would be needed in the near term and there would be time to gather substantially more information about the balance of risks relating to trends in aggregate demand and supply.

Open market operations after the meeting were directed toward implementing and maintaining the desired slight tightening of pressure on reserve positions, and the federal funds rate averaged very close to the Committee's 5¼ percent target. Most other short-term market interest rates posted small mixed changes on balance because the policy action was widely anticipated and the FOMC's policy announcement after the August 24 meeting referenced markedly diminished inflation risks. However, longer-term yields rose somewhat over the intermeeting period in response to the receipt of new information indicating both surprisingly strong spending at home and abroad and higher commodity prices. Most measures of share prices in equity markets registered sizable declines over the intermeeting period, apparently reflecting not only higher interest rates but also concerns that U.S. stocks might be overvalued and that foreign equities were becoming relatively more attractive as economic prospects brightened abroad.

In foreign exchange markets, the trade-weighted value of the dollar changed little over the period in relation to the currencies of a broad group of important U.S. trading partners. The dollar depreciated against the currencies of the major foreign industrial countries, especially the Japanese yen, in response to generally stronger-than-expected incoming data on spending and production in those countries. However, the dollar rose against the currencies of the other important trading partners in the broad group, reflecting sizable declines in the currencies of several countries in Latin America and Asia.

Despite a further rise in opportunity costs, M2 and M3 continued to grow at moderate rates in August and evidently in September as well. Expansion of these two monetary aggregates was supported by further rapid expansion in the demand for currency and stronger inflows to retail money market funds at a time of weakness in U.S. bond and equity markets. In addition, growth of M3 was sustained by large flows into institution-only money market funds as the yields on those funds caught up to earlier increases in short-term market rates. For the year through September, M2 was estimated to have increased at a rate somewhat above the Committee's annual range and M3 at a rate just above the upper end of its range. Total domestic nonfinancial debt continued to expand at a pace somewhat above the middle of its range.

The staff forecast prepared for this meeting suggested that the expansion would gradually moderate to a rate around or perhaps a little below the growth of the economy's estimated potential. The growth of domestic final demand increasingly would be held back by the anticipated waning of positive wealth effects associated with earlier large gains in equity prices; the slower growth of spending on consumer durables, houses, and business equipment in the wake of the prolonged buildup in the stocks of these items; and the higher intermediate- and longer-term interest rates that had evolved as markets came to expect that a rise in short-term interest rates would be needed to achieve a better balance between aggregate demand and aggregate supply. The lagged effects of the earlier rise in the foreign exchange value of the dollar were expected to place continuing, but substantially diminishing, restraint on U.S. exports for some period ahead. Core price inflation was projected to rise somewhat over the forecast horizon, in part as a result of higher non-oil import prices and some firming of gains in nominal labor compensation in persistently tight labor markets that would not be fully offset by rising productivity growth.

In the Committee's discussion of current and prospective economic conditions, members commented that the incoming information suggested that the expansion had been considerably stronger in recent months than many had anticipated, while most measures of inflation had remained subdued. The economy's substantial momentum seemed likely to persist over the balance of the year, but the members continued to expect some slackening during the year ahead. This outlook was supported by the emergence of somewhat less accommodative conditions in financial markets, including the increases that had occurred in interest rates over the past several months and the steadying of stock market prices over the same period. On the other hand, foreign economies were strengthening more quickly than anticipated and rising exports were likely to offset part of the slowdown in domestic demand.

The implications of continued robust growth for the inflation outlook depended critically on judgments about the supply side of the economy. Productivity and economic potential seemed to have been growing at an increasingly rapid rate in recent years. That acceleration had itself tended to boost consumption and investment demand—in complex interactions of aggregate supply and demand—but it also had held down increases in unit costs and prices. A great deal of uncertainty surrounded the behavior of productivity growth going forward, but some further pickup, and the associated ability of the economy to accommodate more rapid growth without added inflation, was a possibility that could not be overlooked. However, a further pickup in productivity growth was by no means assured, and a number of other favorable developments in supply and prices that had acted to restrain inflation in recent years had already begun to dissipate or reverse. These included the substantial upturn in energy prices, the ebbing of import price declines, and the pickup in health care costs; adverse trends in the latter two factors in particular were likely to be extended. In these circumstances, members generally saw some risk of rising inflation going forward, but they also recognized that similar forecasts in recent years had proved wrong and that considerable uncertainty surrounded expectations of somewhat higher core inflation.

In their review of developments across the nation, members reported continued high levels of activity in all regions and few indications of moderating growth, though agriculture remained relatively depressed in many areas. The anecdotal information from around the nation clearly supported the overall statistical evidence of persisting strength in key components of domestic demand. Consumer spending, notably for light motor vehicles, was continuing to rise at a brisk pace. Some of the strength in consumer durables was related to purchases associated with homebuilding, which, though likely to slacken a little owing to the rise in mortgage interest rates, seemed to be staying at a high level. While consumer spending probably would be sustained by further anticipated growth in employment and incomes, the pause in the stock market, should it persist, and the attendant effects on financial wealth were expected with some lag to damp further gains in consumer expenditures.

Business fixed investment appeared to have accelerated to a surprising extent in the third quarter from an already robust pace earlier in the year. Further noteworthy gains were recorded in business expenditures for computing and communications equipment, evidently reflecting ongoing efforts to take advantage of declining prices and improving technology. Some of the rise in such spending could represent accelerated purchases in advance of the century date change and might well tend to be offset in early 2000. Over time, however, ongoing efforts to enhance productivity for competitive reasons suggested further vigorous growth in spending for such equipment. Forecasts of other business investment expenditures were much less ebullient and on the whole pointed to little change. Building activity currently displayed substantial strength in some major cities, largely involving office and hotel structures, but nonresidential construction activity more generally was relatively sluggish. It seemed likely that commercial building activity would be damped later as new capacity was completed and financing became less attractive in response to the rise that had occurred in market interest rates.

The prospects for business inventories over coming months were difficult to evaluate, with the usual uncertainties accentuated by century date change effects. According to fragmentary information, inventory investment picked up during the summer months from a very low pace in the second quarter. To some extent, the recent strengthening may have reflected precautionary stockbuilding as insurance against potential supply disruptions relating to the century date change. Such stockbuilding might well intensify during the closing months of the year and be reversed early next year, with effects of uncertain magnitude on overall economic activity in that period. Looking beyond such a swing, business inventories, which currently appeared to be near desired levels in most industries, were projected to grow at a moderate pace broadly in line with the expansion in final sales.

The strengthening of many economies around the world was seen as a harbinger of increasing demand for U.S. exports, a view that was reinforced by growing anecdotal indications of improving foreign markets for a wide range of U.S. products. An aspect of that improvement was more attractive investment opportunities abroad and some associated weakening in the foreign exchange value of the dollar that implied upward pressure on the prices of imports and to an uncertain extent on those of competing domestically produced products. Moreover, some members saw the possibility of a steeper drop in the dollar—under pressure from burgeoning foreign dollar portfolios as a consequence of very large U.S. current account deficits—as an added source of risk to the maintenance of sustainable growth and low inflation in the United States.

In the Committee's discussion of the outlook for inflation, a number of members emphasized that the behavior of prices had remained surprisingly benign for an extended period, confounding earlier forecasts of appreciable acceleration stemming from tight labor markets and rising labor costs. That experience argued forcefully in their view for the need to regard forecasts of increasing inflation with considerable caution. Most members nonetheless continued to view some increase in core price inflation as a definite possibility. This view reflected their expectations that the current expansion, even if it did moderate to a pace approximating the economy's trend potential growth, would do so at a level of resource use that, based on the historical record, exceeded the economy's sustainable capacity—perhaps by even more than at present, given the evident strength of aggregate demand. Such an outcome seemed likely to generate further pressures on unit labor costs, which had tended in recent years to be contained by accelerating productivity. There was no evidence that the acceleration was coming to an end, but the members saw a clear risk that upward pressures on labor costs could at some point outpace gains in productivity. Members also mentioned that labor compensation would come under greater pressures as a result of rising healthcare benefit costs and possible increases in the minimum wage.

Other factors cited as pointing to a less benign inflation performance involved the waning or reversal of a number of temporary influences that had exerted a beneficial effect on prices in recent years. In particular, the decline of the dollar from its recent high in July, especially if it were to continue, would mean higher import prices and reduced price competition for a wide range of domestic goods. In this regard, several members observed that they were hearing noticeably fewer comments by business contacts about their inability to raise prices. Members also noted that, in the context of apparently strengthening economic activity worldwide, non-oil commodity prices seemed poised to turn upward, though they had risen only slightly thus far. While oil prices, which had increased sharply this year, had changed relatively little recently and could move down in the future, secondary effects of the earlier increase on costs and prices in other sectors of the economy seemed likely. Nonetheless, considerable uncertainty surrounded expectations of rising inflation. Labor cost increases had not turned up, and core inflation continued to edge lower. Further improvements in productivity growth could keep price pressures in check for some time.

In the Committee's discussion of policy for the intermeeting period ahead, all the members indicated that they favored or could accept an unchanged policy stance. Members commented that they saw little risk of a surge in inflation over coming months, though some pickup from the currently subdued level of core price inflation was a distinct possibility under prospective economic conditions. It was noted that expanding aggregate supply, boosted by accelerating productivity, had remained in reasonable balance with rapidly growing aggregate demand despite an already high level of economic activity; however, substantial uncertainty surrounded the outlook for aggregate supply and aggregate demand going forward, and it was unclear how their interaction would affect the behavior of inflation. In light of the uncertainties surrounding these developments, the members agreed that it would be desirable to await more evidence on the performance of the economy, and in this regard considerable new information on the behavior of the economy and the outlook for inflation would become available during the intermeeting period. The risks of waiting seemed small at this juncture, in part because inflation and inflation expectations were not likely to worsen substantially in the near term, and the Committee had demonstrated its willingness to take needed anticipatory action to curb rising inflationary pressures that could threaten the overall performance of the economy. They also agreed that century date change concerns were not likely to be of a kind or magnitude that would preclude a policy tightening move at the November meeting, should such an action seem warranted at that time.

On the issue of the tilt in the Committee's directive, a majority of the members favored associating an unchanged policy stance with a directive that was biased toward restraint. These members did not anticipate that intermeeting developments would require policy to be tightened during the weeks immediately ahead, but they believed that the Committee probably would need to move to a less accommodative policy stance in the relatively near future, possibly at the November meeting. They also believed that, given the Committee's recently adopted practice of immediately announcing its decisions to change the symmetry of the directive, an asymmetrical directive would help convey the message that policy adjustments might not yet be completed for the balance of this year and that the Committee remained concerned about potential inflationary developments in coming months. Other members, while generally agreeing that the risks pointed on balance to some rise in inflation over time, nonetheless were quite uncertain about the timing of any additional firming in monetary policy and preferred to leave the Committee's possible future course of action more open. Even so, they could accept an asymmetric directive in light of the consensus that had emerged at this meeting in favor of an unchanged policy stance.

With regard to the Committee's announcement of its decision to adopt an asymmetric directive, members observed that the recent practice of making such announcements had led to some misinterpretations of the Committee's intentions and seemed to have added to volatility in financial markets. As a consequence, Committee members briefly considered alternative treatments of symmetry and disclosure for this meeting. Because the Committee had begun a process for examining the wording of its directive and its announcement policy, most of the members concluded that the most satisfactory alternative for now, though it was not fully satisfactory, was to continue with the Committee's recent announcement practice. However, the working group chaired by Governor Ferguson was requested to expedite its report, if possible.

At the conclusion of this discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System Account in accordance with the following domestic policy directive:

The information reviewed at this meeting suggests that the expansion of economic activity was substantial in the quarter just ended. Nonfarm payroll employment increased briskly through August, and the civilian unemployment rate dropped back to 4.2 percent, matching its low for the year. Industrial production was up appreciably further in July and August. Total retail sales posted sizable gains over the two months. Housing construction apparently has slowed somewhat but has remained at a high level. Available indicators suggest that the expansion in business capital spending has continued to be rapid. The nominal deficit on U.S. trade in goods and services widened in July from its average in the second quarter. Inflation has continued at a moderate pace, albeit somewhat above that in 1998 owing to a sharp rebound in energy prices.

Most short-term interest rates have posted small mixed changes since the meeting on August 24, 1999, while longer-term yields have risen somewhat. Most measures of share prices in equity markets have registered sizable declines over the intermeeting period. In foreign exchange markets, the trade-weighted value of the dollar has changed little over the period in relation to the currencies of a broad group of important U.S. trading partners.

M2 and M3 have continued to grow at a moderate pace. For the year through September, M2 is estimated to have increased at a rate somewhat above the Committee's annual range and M3 at a rate just above the upper end of its range. Total domestic nonfinancial debt has continued to expand at a pace somewhat above the middle of its range.

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. In furtherance of these objectives, the Committee reaffirmed at its meeting in June the ranges it had established in February for growth of M2 and M3 of 1 to 5 percent and 2 to 6 percent respectively, measured from the fourth quarter of 1998 to the fourth quarter of 1999. The range for growth of total domestic nonfinancial debt was maintained at 3 to 7 percent for the year. For 2000, the Committee agreed on a tentative basis in June to retain the same ranges for growth of the monetary aggregates and debt, measured from the fourth quarter of 1999 to the fourth quarter of 2000. The behavior of the monetary aggregates will continue to be evaluated in the light of progress toward price level stability, movements in their velocities, and developments in the economy and financial markets.

To promote the Committee's long-run objectives of price stability and sustainable economic growth, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 5¼ percent. In view of the evidence currently available, the Committee believes that prospective developments are more likely to warrant an increase than a decrease in the federal funds rate operating objective during the intermeeting period.

Votes for this action: Messrs. Greenspan, McDonough, Boehne, Ferguson, Gramlich, McTeer, Meyers, Moskow, Kelley, and Stern. Votes against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday, November 16, 1999.

The meeting adjourned at 1:25 p.m.

Donald L. Kohn
Secretary

Legal Developments

JOINT FINAL RULE—AMENDMENTS TO SAFETY AND SOUNDNESS STANDARDS

The Office of the Comptroller of the Currency (OCC), the Board of Governors of the Federal Reserve System (Board), the Federal Deposit Insurance Corporation (FDIC), and the Office of Thrift Supervision (OTS) (collectively, the Agencies) are updating their procedural rules pertaining to safety and soundness standards issued under section 39 of the Federal Deposit Insurance Act (FDI Act). This joint final rule adopts, with only one technical change, the Agencies' interim rules.

Effective November 29, 1999, 12 C.F.R. Parts 30, 263, 364, and 570 are amended as follows:

Part 30–Safety and Soundness Standards

Accordingly, the interim rule amending 12 C.F.R. Part 30, which was published at 63 *Federal Register* 55,486 on October 15, 1998, was superseded by an interim rule published at 64 *Federal Register* 52,638 on September 30, 1999.

Part 263–Rules of Practice for Hearings

Accordingly, the interim rule amending 12 C.F.R. Part 263, which was published at 63 *Federal Register* 55,486 on October 15, 1998, is adopted as a final rule without change.

Part 364–Standards for Safety and Soundness

Accordingly, the interim rule amending 12 C.F.R. Part 364, which was published at 63 *Federal Register* 55,486 on October 15, 1998, is adopted as a final rule without change.

Part 570–Submission and Review of Safety and Soundness

Compliance Plans and Issuance of Orders to Correct Safety and Soundness Deficiencies

1. The authority citation for Part 570 continues to read as follows:

Authority: 12 U.S.C. 1831p-1.

2. Section 570.1(c) is revised to read as follows:

Section 570.1–Authority, purpose, scope and preservation of existing authority.

* * * * *

(c) *Scope*. This part and the Interagency Guidelines Establishing Safety and Soundness Standards as set forth at Appendix A to this part and the Interagency Guidelines Establishing Year 2000 Standards for Safety and Soundness as set forth at Appendix B to this part implement the provisions of section 39 of the FDI Act as they apply to savings associations.

* * * * *

FINAL RULE—AMENDMENT TO REGULATION A

The Board of Governors has amended 12 C.F.R. Part 201, its Regulation A (Extensions of Credit by Federal Reserve Banks; Change in Discount Rate), to reflect its approval of an increase in the basic discount rate at each Federal Reserve Bank. The Board acted on requests submitted by the Boards of Directors of the twelve Federal Reserve Banks.

Effective November 16, 1999, 12 C.F.R. Part 201 is amended as follows. The rate changes for adjustment credit were effective on the dates specified in 12 C.F.R. 201.51.

Part 201–Extensions of Credit by Federal Reserve Banks (Regulation A)

1. The authority citation for 12 C.F.R. Part 201 continues to read as follows:

Authority: 12 U.S.C. 343 *et seq*., 347a, 347b, 347c, 347d, 348 *et seq*., 357, 374, 374a, and 461.

2. Section 201.51 is revised to read as follows:

Section 201.51–Adjustment credit for depository institutions.

The rates for adjustment credit provided to depository institutions under section 201.3(a) are:

Federal Reserve Bank	Rate	Effective
Boston	5.0	November 16, 1998
New York	5.0	November 18, 1998
Philadelphia	5.0	November 18, 1998
Cleveland	5.0	November 16, 1998
Richmond	5.0	November 16, 1998
Atlanta	5.0	November 17, 1998
Chicago	5.0	November 18, 1998
St. Louis	5.0	November 18, 1998
Minneapolis	5.0	November 18, 1998
Kansas City	5.0	November 16, 1998
Dallas	5.0	November 17, 1998
San Francisco	5.0	November 16, 1998

ORDERS ISSUED UNDER BANK HOLDING COMPANY ACT

Orders Issued Under Section 3 of the Bank Holding Company Act

Brookline Bancorp, MHC
Brookline, Massachusetts

Brookline Bancorp, Inc.
Brookline, Massachusetts

Order Approving Acquisition of Shares of a Bank Holding Company

Brookline Bancorp, MHC and its subsidiary, Brookline Bancorp, Inc., both of Brookline, Massachusetts (collectively "Brookline"), bank holding companies within the meaning of the Bank Holding Company Act ("BHC Act"), have requested the Board's approval under section 3 of the BHC Act (12 U.S.C. §1842) to acquire up to 9.9 percent of the voting shares of Medford Bancorp, Inc. ("Medford") and thereby acquire an interest in Medford's wholly owned subsidiary bank, Medford Savings Bank, both of Medford, Massachusetts.[1]

Notice of this proposal, affording interested persons an opportunity to submit comments, has been published (64 *Federal Register* 55,290 (1999)). The time for filing comments has expired, and the Board has considered this proposal and all comments received in light of the factors set forth in section 3 of the BHC Act. Brookline is the 33rd largest depository institution in Massachusetts, controlling total deposits of $509.3 million, representing less than 1 percent of total deposits in depository institutions in the state.[2] Medford is the 15th largest depository institution in Massachusetts, controlling $902.6 million in deposits, representing less than 1 percent of total deposits in depository institutions in the state. Brookline has stated that it proposes to acquire the shares of Medford as a passive investment and that Brookline would not control Medford after this investment.

1. The proposed acquisition would be made by Brookline Securities Corp., a wholly owned subsidiary of Brookline Bancorp, Inc.

2. Asset and deposit data are as of June 30, 1999. In this context, depository institutions include commercial banks, savings banks, and savings associations.

In connection with this proposal, the Board received comments from Medford objecting to the proposal on the grounds that the investment would have an adverse effect on the managerial resources and financial condition of Brookline and Medford, and would harm the communities that Medford serves. The Board has considered carefully Medford's comments in light of the factors that the Board must consider under section 3(c) of the BHC Act.[3]

The Board previously has stated that the acquisition of less than a controlling interest in a bank or bank holding company is not a normal acquisition for a bank holding company.[4] However, the requirement in section 3(a)(3) of the BHC Act for Board approval before a bank holding company acquires more than 5 percent of the voting shares of a bank suggests that Congress contemplated the acquisition by bank holding companies of between 5 and 25 percent of the voting shares of banks.[5] On this basis, the Board previously has approved the acquisition by a bank holding company of less than a controlling interest in a bank or bank holding company where the proposal meets the factors set forth in the BHC Act.[6]

Medford contends that the proposed investment would constitute a controlling investment in Medford, and would enable Brookline to exercise a coercive influence on Medford's corporate affairs. Brookline has agreed to abide by certain commitments that the Board has relied on in other cases to determine that an investing bank holding company would not be able to exercise a controlling influence over another bank holding company or bank for purposes of the BHC Act.[7] For example, Brookline has committed not to exercise or attempt to exercise a controlling influence over

3. The Board may not approve an application that would violate state law. *Whitney Nat'l Bank in Jefferson Parish v. Bank of New Orleans & Trust Co.*, 379 U.S. 411, 419 (1965). Medford contends that Massachusetts law requires Brookline to file an application with the Massachusetts Board of Bank Incorporation ("State Bank Board"). The Massachusetts Commissioner of Banks ("Commissioner") has been provided with notice of the application filed with Board, as required under section 3 of the BHC Act, 12 U.S.C. § 1842(b)(1), and is reviewing whether Brookline also is required to file an application with the State Bank Board. The Commissioner has not filed any comments with the Board about this proposal. In addition, Massachusetts law appears to require Brookline to file such an application only if Brookline owns or controls 25 percent or more of the voting stock of each of two or more banking institutions. Mass. Gen. Laws ch. 167A, § 2(2)(b). At this time, Brookline owns or controls 25 percent or more of the voting stock of only one banking institution. Accordingly, it does not appear at this time that the Board is precluded from approving this proposal. The Board's approval of the application is conditioned on Brookline obtaining any approval that is required by Massachusetts law.

4. *See, e.g., First Mariner Bancorp*, 84 *Federal Reserve Bulletin* 956, 957 (1998); *Sun Banks, Inc.*, 71 *Federal Reserve Bulletin* 243 (1985) ("*Sun Banks*"); *State Street Boston Corp.*, 67 *Federal Reserve Bulletin* 862, 863 (1981).

5. *See* 12 U.S.C. § 1842(a)(3).

6. *See, e.g., GB Bancorporation*, 83 *Federal Reserve Bulletin* 115 (1997) (acquisition of up to 24.9 percent of the voting shares of a bank); *Mansura Bancshares, Inc.*, 79 *Federal Reserve Bulletin* 37 (1993) (acquisition of 9.7 percent of the voting shares of a bank holding company).

7. *See, e.g., National Bancshares Corp. of Texas*, 82 *Federal Reserve Bulletin* 565 (1996); *First Southern Bancorp, Inc.*, 82 *Federal*

the management or policies of Medford or any of its subsidiaries; not to seek or accept representation on the board of directors of Medford or any of its subsidiaries; and not to have any director, officer, employee, or agent interlocks with Medford. Brookline also has committed not to attempt to influence the dividend policies, loan decisions, or operations of Medford or any of its subsidiaries. Moreover, Brookline, which proposes to acquire less than 10 percent of the voting shares of Medford, may not acquire any additional shares of Medford without prior Board approval under the BHC Act.

Medford contends that these commitments by Brookline are insufficient to prevent Brookline from exercising a controlling influence on Medford. The Board notes, however, that it has adequate supervisory authority to monitor Brookline's compliance with its commitments, and expressly retains authority to initiate a control proceeding against Brookline if facts presented later indicate that Brookline or any of its subsidiaries or affiliates, in fact, controls Medford for purposes of the BHC Act. Based on these commitments and all other facts of record, it is the Board's judgment that Brookline would not acquire control of Medford for purposes of the BHC Act through consummation of this proposal.

Competitive Considerations

In considering an application under section 3 of the BHC Act, the Board is required to evaluate a number of factors, including the competitive effects of the proposal. The Board previously has noted that one company need not acquire control of another company in order to substantially lessen competition between them.[8] The Board has found that noncontrolling interests in directly competing depository institutions may raise serious questions under the BHC Act, and has concluded that the specific facts of each case will determine whether the minority investment in a company would be anticompetitive.[9]

Brookline and Medford compete directly in the Boston banking market.[10] If Brookline and Medford are considered as a combined organization, Brookline would be the 12th largest depository institution organization in the Boston banking market, controlling $1.3 billion in deposits, representing less than 1 percent of total deposits in depository institutions in the market.[11] The Herfindahl-Hirschman Index ("HHI") for the Boston banking market would remain unchanged at 1899.12.[12] Accordingly, based on all the facts of record, the Board concludes that consummation of this proposal would not have a significantly adverse effect on competition or on the concentration of resources in any relevant market in which Brookline and Medford compete.[13]

Other Factors

The Board also is required under section 3(c) of the BHC Act to consider the financial and managerial resources and future prospects of the companies and banks concerned. Medford contends that Brookline's investment could distract the attention of Medford's management from the operation of Medford, restrict Medford's ability to effect a merger, and adversely affect Medford's employees and its ability to retain customers. The Board believes that the commitments made by Brookline to maintain its investment as a passive investment and not to exercise a controlling influence over Medford reduce the potential adverse effects of the proposal. Moreover, the Board notes that Brookline currently is well capitalized and would remain well capitalized on consummation of the proposal. Based on all the facts of record, the Board has concluded that the financial and managerial resources and the future prospects of Brookline, Medford, and their subsidiaries are consistent with approval of this application, as are the other supervisory factors the Board must consider under section 3 of the BHC Act. In addition, considerations relating to the convenience and needs of the communities to be served, including the record of performance of the institutions involved under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*), are consistent with approval of the application.

Conclusion

Based on the foregoing, and on all other facts of record, the Board has determined that this application should be, and hereby is, approved. The Board's approval is specifically conditioned on compliance by Brookline with all commitments made in connection with this application, including the commitments discussed in this order. The commitments and conditions relied on by the Board in reaching this decision are deemed to be conditions imposed in writing

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Reserve Bulletin 424 (1996). These commitments are set forth in the Appendix.

8. *See, e.g. First State Corp.*, 76 *Federal Reserve Bulletin* 376, 379 (1990); *Sun Banks* at 243.

9. *See, e.g. Sun Banks* at 244.

10. The Boston banking market is defined as the Boston Ranally Metropolitan Area and the town of Lyndeboro in New Hampshire.

11. Market deposit data are as of June 30, 1998, and reflect acquisitions through October 15, 1999.

12. Market share data are based on calculations that include the deposits of thrift institutions at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. *See, e.g., Midwest Financial Group*, 75 *Federal Reserve Bulletin* 386, 387 (1989); *National City Corporation*, 70 *Federal Reserve Bulletin* 743, 744 (1984). Thus, the Board regularly has included thrift deposits in the calculation of market share on a 50-percent weighted basis. *See, e.g., First Hawaiian, Inc.*, 77 *Federal Reserve Bulletin* 52, 55 (1991).

13. Under the DOJ Guidelines, 49 *Federal Register* 26,823 (June 29, 1984), a market in which the post-merger HHI is above 1800 is considered to be highly concentrated. The Department of Justice has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anticompetitive effects) unless the post-merger HHI is at least 1800 and the merger increases the HHI by more than 200 points. The Department of Justice has stated that the higher than normal thresholds for an increase in the HHI when screening bank mergers and acquisitions for anticompetitive effects implicitly recognize the competitive effects of limited-purpose and other nondepository financial entities.

by the Board in connection with its findings and decision, and, as such, may be enforced in proceedings under applicable law.

The transaction shall not be consummated before the fifteenth calendar day following the effective date of this order, or later than three months after the effective date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Boston, acting pursuant to delegated authority.

By order of the Board of Governors, effective November 29, 1999.

Voting for this action: Chairman Greenspan, Vice Chairman Ferguson, and Governors Kelley, Meyer, and Gramlich.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Appendix

As part of this proposal, Brookline Bancorp, MHC ("MHC"), Brookline Bancorp, Inc. ("SHC"), and Brookline Securities Corp. ("Securities Corp"), each of Brookline, Massachusetts, commit that they will not, without the prior approval of the Federal Reserve Board, directly or indirectly:

(1) Exercise or attempt to exercise a controlling influence over the management or policies of Medford Bancorp, Inc. ("Medford") or any of its subsidiaries;
(2) Seek or accept representation on the board of directors of Medford or any of its subsidiaries;
(3) Have or seek to have any employee or representative serve as an officer, agent, or employee of Medford or any of its subsidiaries;
(4) Take any action that would cause Medford or any of its subsidiaries to become a subsidiary of MHC, SHC, Securities Corp, or any of their subsidiaries;
(5) Acquire or retain shares that would cause the combined interests of MHC, SHC, Securities Corp, and any of their subsidiaries and their officers, directors, and affiliates to equal or exceed 25 percent of the outstanding voting shares of Medford or any of its subsidiaries;
(6) Propose a director or slate of directors in opposition to a nominee or slate of nominees proposed by the management or the board of directors of Medford or any of its subsidiaries;
(7) Solicit or participate in soliciting proxies with respect to any matter presented to the shareholders of Medford or any of its subsidiaries;
(8) Attempt to influence the dividend policies or practices; the investment loan, or credit decisions or policies; the pricing of services; personnel decisions; operations activities (including the location of any offices or branches or their hours of operation, etc.); or any similar activities or decisions of Medford or any of its subsidiaries;
(9) Dispose or threaten to dispose of shares of Medford or any of its subsidiaries as a condition of specific action or nonaction by Medford or any of its subsidiaries; or
(10) Enter into any other banking or nonbanking transactions with Medford or any of its subsidiaries, except that MHC or SHC may establish and maintain deposit accounts with Medford's subsidiary depository institution, provided that the aggregate balance of all such deposit accounts does not exceed $500,000 and that the accounts are maintained on substantially the same terms as those prevailing for comparable accounts of persons unaffiliated with Medford or any of its subsidiaries.

The Sanwa Bank, Limited
Osaka, Japan

Order Approving the Acquisition of a Bank Holding Company

The Sanwa Bank, Limited ("Sanwa"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has requested the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to retain up to 32 percent of the voting shares of The Toyo Trust and Banking Company, Limited, Tokyo, Japan ("Toyo"), and thereby retain control of Toyo's wholly owned U.S. subsidiary bank, Toyo Trust Company of New York, New York, New York ("Toyo Bank").[1]

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (64 *Federal Register* 25,041 (1999)). The time for filing comments has expired, and the Board has considered the proposal and all comments received in light of the factors set forth in section 3 of the BHC Act.

Sanwa, with total consolidated assets of approximately $418 billion, is the fourth largest banking organization in Japan.[2] In the United States, Sanwa owns Sanwa Bank California, San Francisco, California ("Sanwa Bank"), a state-chartered commercial bank. In addition, Sanwa operates branches in New York, New York, Chicago, Illinois, and San Francisco and Los Angeles, California; and representative offices in Houston, Texas, and New York, New York. Sanwa also engages in a broad range of permissible

1. On March 30, 1999, Sanwa acquired newly issued shares of Toyo that, when aggregated with the 4.9 percent of Toyo's voting shares previously held by Sanwa, represented approximately 32 percent of Toyo's voting shares. This investment was part of a plan to increase Toyo's capital, which was approved by the Japanese government. On consummation of the investment, Sanwa placed the newly acquired Toyo voting shares in a voting trust that does not permit Sanwa to vote such shares until U.S. regulators act on Sanwa's proposed acquisition of control of Toyo. Under the terms of the trust agreement, the voting trust terminates if the Board and the New York State Banking Department ("Department") approve Sanwa's retention of its ownership interest in Toyo. The Department approved Sanwa's application to acquire control of Toyo on April 8, 1999.

2. Asset data are as of March 31, 1999, and are based on exchange rates then applicable. Ranking data are as of December 31, 1998.

nonbanking activities in the United States through subsidiaries, including underwriting and dealing in debt and equity securities to a limited extent.

Toyo, with total consolidated assets of approximately \$66 billion, is the 19th largest banking organization in Japan. Toyo controls Toyo Bank and operates a branch in New York, New York.

Interstate Analysis

Section 3(d) of the BHC Act allows the Board to approve an application by a bank holding company to acquire control of a bank located in a state other than the home state of the bank holding company if certain conditions are met. For purposes of the BHC Act, the home state of Sanwa is California,[3] and Toyo Bank is located in New York. All the conditions for an interstate acquisition enumerated in section 3(d) are met in this case.[4] In light of all the facts of record, the Board is permitted to approve the proposal under section 3(d) of the BHC Act.

Competitive Considerations

Sanwa and Toyo compete directly in the New York/New Jersey Metropolitan banking market ("New York banking market").[5] Sanwa's New York branch controls deposits representing less than 1 percent of the deposits in the market. Toyo, through its New York branch and Toyo Bank, also controls deposits representing less than 1 percent of the deposits in the market.[6] On consummation of the proposal, numerous competitors would remain in the market, and the market would remain unconcentrated. Based on these and all other facts of record, the Board concludes that consummation of the proposal would not result in any significantly adverse effects on competition or on the concentration of banking resources in the New York banking market or any other relevant banking market.

Certain Supervisory Considerations

Under section 3 of the BHC Act, the Board may not approve an application involving a foreign bank unless the bank is "subject to comprehensive supervision or regulation on a consolidated basis by the appropriate authorities in the bank's home country."[7] The Board previously has determined, in applications under the International Banking Act (12 U.S.C. § 3101 *et seq.*) ("IBA") and the BHC Act, that certain Japanese commercial banks were subject to comprehensive consolidated supervision by their home country supervisor.[8] In this case, the Board has determined that Sanwa is supervised on substantially the same terms and conditions as the other Japanese banks. Based on all the facts of record, the Board has concluded that Sanwa is subject to comprehensive supervision and regulation on a consolidated basis by its home country supervisor.

The BHC Act also requires the Board to determine that the foreign bank has provided adequate assurances that it will make available to the Board such information on its operations and activities and those of its affiliates that the Board deems appropriate to determine and enforce compliance with the BHC Act. The Board has reviewed the restrictions on disclosure in jurisdictions where Sanwa has material operations and has communicated with relevant government authorities concerning access to information. Sanwa has committed that, to the extent not prohibited by applicable law, it will make available to the Board such information on the operations of Sanwa and any of its affiliates that the Board deems necessary to determine and enforce compliance with the BHC Act, the IBA, and other applicable federal law. Sanwa also has committed to cooperate with the Board to obtain any waivers or exemptions that may be necessary in order to enable Sanwa to make any such information available to the Board. In light of these commitments and other facts of record, the Board has concluded that Sanwa has provided adequate assurances of access to any appropriate information the Board may request. For these reasons, and based on all the facts of record, the Board has concluded that the supervisory factors it is required to consider under section 3(c)(3) of the BHC Act are consistent with approval.

3. A bank holding company's home state is that state in which the total deposits of all banking subsidiaries of such company were the largest on July 1, 1966, or the date on which the company became a bank holding company, whichever is later. 12 U.S.C. § 1841(o) (4) (C).

4. Sanwa is adequately capitalized and adequately managed, as defined by applicable law. 12 U.S.C. § 1842(d)(1)(A). Toyo Bank has been in existence and operated continuously for at least the period of time required by New York state banking law. *See* 12 U.S.C. § 1842 (d) (1) (B); N.Y. Banking Law §142-a (1998). On consummation of the proposal, Sanwa and its affiliates would control less than 10 percent of the total amount of deposits of insured depository institutions in the United States. 12 U.S.C. § 1842(d)(2). All other requirements of section 3(d) of the BHC Act would be met on consummation of the proposal.

5. The New York banking market includes New York City; Nassau, Orange, Putnam, Rockland, Suffolk, Sullivan, and Westchester Counties in New York; Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, Warren, and a portion of Mercer Counties in New Jersey; Pike County in Pennsylvania; and portions of Fairfield and Litchfield Counties in Connecticut.

6. Deposit data are as of June 30, 1998.

7. 12 U.S.C. § 1842(c)(3)(B). As provided in Regulation Y, the Board determines whether a foreign bank is subject to consolidated home country supervision under the standards set forth in Regulation K. 12 C.F.R. 225.13(a)(4). Regulation K provides that a foreign bank may be considered subject to consolidated supervision if the Board determines that the bank is supervised or regulated in such a manner that its home country supervisor receives sufficient information on the worldwide operations of the foreign bank, including the relationships of the bank to its affiliates, to assess the foreign bank's overall financial condition and compliance with law and regulation. 12 C.F.R. 211.24(c)(1)(ii).

8. *See The Fuji Bank, Limited*, 85 *Federal Reserve Bulletin* 338 (1999); and *The Mitsubishi Bank, Limited*, 82 *Federal Reserve Bulletin* 436 (1996).

Financial, Managerial, and Convenience and Needs Considerations

The Board also has carefully considered the financial and managerial resources and future prospects of Sanwa, Toyo, and their respective subsidiaries, and the effect the proposal would have on such resources. The Board notes that the proposal is incidental to a corporate restructuring of Japanese banking organizations that is intended to enhance the overall financial strength and future prospects of both organizations. Sanwa's reported capital levels exceed the minimum levels that would be required under the Basle Capital Accord, and its capital levels are considered equivalent to the capital levels that would be required of a U.S. banking organization under similar circumstances. The Board notes, moreover, that the proposal does not involve any expansion of the banking or nonbanking activities of Toyo, and that Sanwa's investment in Toyo has strengthened Toyo's capital position and made additional financial resources available to Toyo Bank.

In addition, the Board has reviewed supervisory information from the home country authorities responsible for supervising Sanwa and Toyo concerning the proposal and the condition of the parties, confidential financial information from Sanwa and Toyo, and reports of examination from the appropriate federal and state supervisors of the affected organizations assessing the financial and managerial resources of the organizations. Based on all the facts of record, the Board has concluded that the financial and managerial resources and future prospects of the organizations involved in the proposal are consistent with approval.

Sanwa Bank received an "outstanding" performance rating at its most recent examination under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA") by the Federal Deposit Insurance Corporation ("FDIC"), as of August 24, 1998. Toyo Bank also received an "outstanding" CRA performance rating from the FDIC at its most recent examination, as of June 8, 1998. In light of all the facts of record, the Board has concluded that considerations relating to the convenience and needs of the communities to be served, including the records of performance of the relevant depository institutions under the CRA, are consistent with approval.

Conclusion

Based on the foregoing and all the facts of record, the Board has determined that the application should be, and hereby is, approved. The Board's approval is specifically conditioned on compliance by Sanwa with all the commitments made in connection with the application and on the Board receiving access to information on the operations or activities of Sanwa and any of its affiliates that the Board determines to be appropriate to determine and enforce compliance by Sanwa and its affiliates with applicable federal statutes. The commitments and conditions relied on by the Board in reaching its decision are deemed to be conditions imposed in writing by the Board in connection with its findings and decision, and, as such, may be enforced in proceedings under applicable law.

By order of the Board of Governors, effective November 24, 1999.

Voting for this action: Chairman Greenspan, Vice Chairman Ferguson, and Governors Kelley, Meyer, and Gramlich.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Orders Issued Under Section 4 of the Bank Holding Company Act

Bayerische Hypo- und Vereinsbank AG
Munich, Germany

Deutsche Bank AG
Deutsche Bank AG
Frankfurt, Germany

Stichting Prioriteit ABN AMRO Holding
Stichting Administratiekantoor ABN AMRO Holding
ABN AMRO Holding N.V.
ABN AMRO Bank N.V.
All of Amsterdam, The Netherlands

Order Approving Notices to Engage in Nonbanking Activities

Bayerische Hypo- und Vereinsbank AG ("BHV"), a foreign banking organization subject to the Bank Holding Company Act ("BHC Act"), and Deutsche Bank AG ("Deutsche Bank") and Stichting Prioriteit ABN AMRO Holding ("ABN AMRO"), Stichting Administratiekantoor ABN AMRO Holding, ABN AMRO Holding N.V., and ABN AMRO Bank N.V., bank holding companies within the meaning of the BHC Act, have requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. §1843 (c) (8)), and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24) to retain up to 12.5 percent of the voting interests in Identrus, LLC, New York, New York ("Identrus"), and to engage through Identrus and other nonbank subsidiaries in acting as a certification authority ("CA") in the United States in connection with financial and nonfinancial transactions and other related activities.[1]

1. BHV, Deutsche Bank, and ABN AMRO and its subsidiaries listed above are hereafter collectively referred to as "Notificants". Foreign banks, such as Notificants, may engage in permissible banking activities in the United States directly through a U.S. branch or agency. A foreign bank must, however, receive the Board's prior approval under section 4(c)(8) to engage in the United States through a nonbank subsidiary in activities that are closely related to banking. In this case, Notificants have requested approval under section 4(c)(8) of the BHC Act to engage in the proposed activities in the United States through Identrus and other nonbank subsidiaries to provide themselves maximum flexibility in structuring their Identrus-related activities. For purposes of this order, references to activities conducted by Notificants are intended to refer to activities conducted through Identrus or other U.S. nonbanking companies.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (64 *Federal Register* 22,866 (1999)). The time for filing comments has expired, and the Board has considered the proposal and all comments received in light of the factors set forth in section 4(c)(8) of the BHC Act. BHV, with total consolidated assets of $575 billion,[2] is the second largest commercial banking organization in Germany, and operates branches in New York, New York, and Chicago, Illinois, and an agency in Los Angeles, California.

Deutsche Bank, with total consolidated assets of $724 billion, is the largest commercial banking organization in Germany. Deutsche Bank controls three subsidiary banks in the United States, and operates a branch in New York, New York, and a representative office in San Francisco, California.

ABN AMRO, with total consolidated assets of $544 billion, is the largest commercial banking organization in The Netherlands. ABN AMRO controls seven depository institutions in Illinois and one commercial bank in New York. ABN AMRO Bank N.V. also operates branches in Boston, Massachusetts; Chicago, Illinois; New York, New York; Pittsburgh, Pennsylvania; and Seattle, Washington; and agencies in Atlanta, Georgia; Miami, Florida; Houston, Texas; and Los Angeles and San Francisco, California.

Each Notificant also engages in a number of nonbanking activities in the United States.

Proposed Activities

Identrus is a joint venture among Notificants and other commercial banks and foreign banking organizations.[3] Under the proposal, Identrus would act as the global rulemaking and coordinating body for a network of financial institutions that would act as CAs and thereby provide services designed to verify or authenticate the identity of customers conducting financial and nonfinancial transactions over the Internet and other "open" electronic networks. To provide these services, Identrus and its network of participating financial institutions (the "Identrus System") would utilize digital certificates and digital signatures created through the use of public key cryptography.

In a CA system using public key cryptography, a company generates (or is assigned) a public key/private key pair and registers as the unique "owner" of the key pair with a CA.[4] Private keys and public keys are a set of different but related mathematical functions that can be used to encrypt and decrypt electronic communications. A message encrypted by a particular private key can be decrypted only by its corresponding public key. Although a private key and its corresponding public key are related, a private key cannot feasibly be derived from its corresponding public key. Thus, while a private key must be kept confidential by the company that is the registered "owner" of the key pair, the company's public key can be made publicly available without jeopardizing the confidentiality of the company's private key. A company sending a business communication (*e.g.*, a purchase order) over an open electronic network like the Internet to another entity uses its confidential private key to digitally sign the message being sent. A digital signature is a compressed and encrypted version of the message to which it is attached. The entity receiving the digitally signed message then uses the sender's public key to decrypt the digital signature.[5] If the receiver successfully decodes the signature with the sender's public key, the receiver can be assured that the message was created using the sender's private key.[6] To be assured that the message was actually sent by the purported sender, however, the receiver must confirm that the private key/public key pair used to sign and decode the message is uniquely "owned" by the purported sender. A CA provides this assurance by issuing "digital certificates" certifying that the relevant private key/public key pair is uniquely associated with the message sender and verifying upon request the validity of such digital certificates. Notificants and other financial institutions participating in the Identrus System ("Participants")[7] would create unique private key/ public key pairs for, and issue digital certificates on behalf of, eligible customers that contract with a Participant to receive Identrus identity authentication services.[8] Each Par-

2. Asset data are as of June 30, 1999, and ranking data are as of December 31, 1998.

3. Bank of America NT & SA, Charlotte, North Carolina, and Citibank, N.A., New York, New York, have applications pending before the Office of the Comptroller of the Currency to invest indirectly in Identrus. The Chase Manhattan Bank, New York, New York, received the approval of the New York State Banking Department to invest indirectly in Identrus. *See* Letter from P. Vincent Conlon, Deputy Superintendent of Banks, New York State Banking Department, to Ronald C. Mayer, The Chase Manhattan Bank, dated April 9, 1999 ("*Chase Letter*"). Identrus expects other U.S. commercial banks and foreign banking organizations to seek approval from appropriate regulatory authorities to invest in Identrus and engage in related activities.

4. A number of nonbanking companies currently operate CA systems that rely on public key cryptography and provide identity authentication services to senders and receivers of electronic communications.

5. The sender's public key may be attached to the digitally signed communication, or the receiver of the message may obtain the sender's public key from a publicly available database.

6. The receiver also can confirm that the message was not altered after it was signed by comparing the message received to the decrypted version of the message text embedded in the digital signature.

7. Participation in the Identrus System is available only to organizations that are engaged primarily in the business of providing financial services, are subject to regulation and examination by a government authority in their home country, and that meet certain eligibility criteria, such as minimum capital requirements and debt rating criteria. A Participant also must agree to be bound by the Identrus operating rules and execute certain participation agreements. Financial institutions would not be required to purchase an ownership interest in Identrus to become a Participant.

8. Participants may provide Identrus-related services only to customers that have agreed to be bound by applicable provisions of the Identrus operating rules and have signed the appropriate customer agreements. The Identrus operating rules allow Participants to provide Identrus-related services only to business entities, such as corporations, and governmental organizations, and not to natural persons. The

ticipant would act as a repository for the digital certificates that it has issued, *i.e.*, it would maintain a database containing information on the status of the outstanding, expired, or revoked digital certificates that it has issued to customers. Participants also would verify for third parties the validity of digital certificates issued to their customers and, upon request of the third party, may provide an explicit warranty as to the validity of the customers' digital certificates.[9] Participants also may process and transmit verification and warranty requests received from customers concerning digital certificates issued by other Participants in the Identrus System. In addition, Participants may provide customers with a limited range of software and hardware required for customers to utilize the Identrus System.[10]

Identrus would provide the infrastructure framework within which Participants would act as CAs and provide related services. The primary function of Identrus would be to act as the "root certification authority" of the Identrus System, *i.e.*, issuing digital certificates to Participants that establish the status of Participants as CAs in the Identrus System and authenticating for customers of, and Participants in, the Identrus System the identity of Participants.[11] Identrus also would (i) establish and maintain the operating rules governing the Identrus System, including the minimum technical requirements for digital certificates and other components of the System; (ii) monitor compliance by Participants with the System's operating rules and technical standards; and (iii) monitor collateral requirements and aggregate warranty exposure for Participants in the Identrus System.[12]

Permissibility of Proposed Activities

Section 4(c)(8) of the BHC Act provides that a bank holding company may, with the Board's approval, engage in any activity that the Board determines to be closely related to banking.[13] The Board previously has authorized bank holding companies under section 4(c)(8) of the BHC Act to act as CAs and provide identity authentication services in connection with payment-related and other financial transactions conducted over electronic networks.[14] The Board has not previously authorized bank holding companies under section 4(c)(8) to act as CAs or provide identity authentication services in connection with nonfinancial transactions.

In determining whether an activity is closely related to banking, the Board and the courts look to whether (1) banks generally provide the proposed services; (2) banks generally provide services that are operationally or functionally so similar to the proposed services as to equip them particularly well to provide the proposed services; or (3) banks generally provide services that are so integrally related to the proposed services as to require their provision in a specialized form.[15]

Banks and bank holding companies have long provided identity authentication services in connection with nonfinancial transactions conducted by third parties and their own traditional banking and lending activities. For example, banks and bank holding companies are authorized to provide notary services to customers.[16] The role of a notary is to authenticate signatures on financial or nonfinancial documents for the benefit of third parties.[17] In order to verify a signature on a paper-based document, a notary must verify the identity of the person signing the document. The role served by a CA with respect to electronic documents is functionally similar to the role served by a notary with respect to paper-based documents.[18]

Similarly, banks traditionally have identified their customers to third parties through the issuance of letters of

Identrus operating rules and customer agreements would make each customer contractually responsible for ensuring that its private key is kept confidential.

9. The operating rules of the Identrus System would provide that a company relying on a digital certificate issued by a Participant would have recourse against the Participant only if the company purchased an explicit warranty from the Participant and then only up to amount of the purchased warranty. A Participant that issues a digital certificate could refuse to issue a warranty with respect to a digital certificate for any *bona fide* reason. The Identrus System would limit the aggregate amount of warranties that a Participant may have outstanding at any one time and would require each Participant to post collateral with Identrus to cover its warranty exposure.

10. For example, Participants may provide smart cards containing digital certificates and smart card readers to their customers.

11. Digital certificates issued by a Participant to a customer are digitally signed by the Participant with the Participant's own private key and are accompanied by a digital certificate issued by Identrus. The digital certificates issued by Identrus would certify that the Participant is an authorized Participant in the Identrus System and that the private key used by a Participant to digitally sign its certificates is uniquely associated with the Participant, thereby authenticating the identity of the Participant.

12. The activities of Notificants and Identrus would be limited to providing the identity authentication and related services described above. Notificants and Identrus would not provide a general encryption or electronic message service, or any warranty of the underlying financial or nonfinancial transaction between customers whose identities are authenticated through the use of the Identrus System.

13. 12 U.S.C. § 1843(c)(8).

14. *See* 12 C.F.R. 225.28(b)(14); *Banc One Corporation, Inc.*, 83 *Federal Reserve Bulletin* 602, 606 (1997); *Citicorp*, 68 *Federal Reserve Bulletin* 505, 510 (1982).

15. *See National Courier Association v. Board of Governors of the Federal Reserve System*, 516 F.2d 1229, 1237 (D.C. Cir. 1975). In addition, the Board may consider any other basis that demonstrates that the proposed activity has a reasonable or close connection or relationship to banking or managing or controlling banks. *See Board Statement Regarding Regulation Y*, 49 *Federal Register* 806 (1984); *Securities Industry Association v. Board of Governors of the Federal Reserve System*, 468 U.S. 207, 210–11 n.5 (1984).

16. *See* OCC Unpublished Interpretive Letter dated June 11, 1985; *Popular, Inc.*, 84 *Federal Reserve Bulletin* 481 (1998).

17. 58 Am. Jur. 2d *Notaries Public* § 31 (2d ed. 1989).

18. The American Bar Association, for example, has noted that the issuance of digital certificates by CAs is "analogous to traditional certification processes undertaken by notaries with respect to documents executed with pen and ink." *See* Digital Signature Guidelines, Information Security Committee, Electronic Commerce and Information Technology Division, Section of Science and Technology, American Bar Association, p. 54 (Aug. 1, 1996).

introduction or letters of reference.[19] In addition, banks and bank holding companies routinely authenticate the identity of customers and noncustomers in connection with their authorized check cashing functions.[20]

Banks and bank holding companies also have long been authorized to issue signature guarantees to issuers of securities and their transfer agents in connection with the transfer of securities.[21] A bank issuing a signature guarantee warrants that the signature of the customer indorsing a certificated security or authorizing the transfer of an uncertificated security is authentic. The issuing bank also warrants that the signer was an appropriate person to indorse the security or authorization (or, if the signature is by an agent, that the agent had actual authority to act on behalf of the appropriate person) and the signer had legal capacity to sign.[22] In light of these warranties, a bank providing a signature guarantee must verify the identity of the customer providing the indorsement or signing the instruction.[23]

Furthermore, identity authentication services are an integral part of many traditional banking functions. Accordingly, banks and bank holding companies have developed sophisticated methods for authenticating the identity of customers and noncustomers that transact business or communicate with the bank or bank holding company through electronic means or otherwise. Many of these activities are operationally and functionally similar to the proposed activities and equip banks and bank holding companies particularly well to provide the proposed services. For example, banks and bank holding companies maintain systems to electronically authenticate the identity of persons engaged in credit and debit card, automated teller machine ("ATM"), home banking, and wire transfer transactions with the institution.[24] Banks and bank holding companies also electronically authenticate the identity of persons in connection with the check and credit card verification services they are authorized to provide to merchants and other businesses.[25]

The Board notes, moreover, that state banks and national banks recently have been authorized to act as CAs and provide identity authentication services in connection with financial and nonfinancial transactions conducted over electronic networks.[26] Based on the foregoing, the Board concludes that acting as a CA and, more generally, authenticating the identity of customers conducting financial and nonfinancial transactions are activities that are closely related to banking within the meaning of section 4(c)(8) of the BHC Act.

As discussed above, Identrus and Notificants also propose to engage in a number of activities as part of and in connection with their proposed CA activities. These activities include (i) processing, transmitting, and storing data necessary for the operation of the Identrus System, such as digital certificates, requests for verification of digital certificates, and warranty requests; (ii) developing and marketing software and hardware necessary for the operation of the Identrus System; and (iii) complying with, monitoring, and enforcing the collateral posting requirements associated with identity warranties. In addition, Identrus would establish operating policies, procedures, and guidelines for the Identrus System.

The Board's Regulation Y permits bank holding companies to provide data processing and data transmission services and facilities (including software and hardware) for the processing and transmission of financial, banking, or economic data, and to engage in activities related to making, acquiring, brokering, or servicing extensions of credit, such as posting collateral and monitoring collateral requirements.[27] Regulation Y also permits bank holding companies to engage in incidental activities that are necessary to the conduct of an activity that is closely related to banking.[28] Identrus and Notificants have represented that they would engage in the additional activities only in connection with their CA activities and would not engage in such activities separate or apart from their CA activities. Notificants also have committed that the data processing and data transmission activities of Notificants and Identrus, including any proposed development or sale of hardware

19. Banks have drafted letters of introduction or letters of reference on behalf of their customers that serve the purpose of introducing the customer to other banks or third parties with which the customer seeks to do business. *See McLeod v. Fourth National Bank of St. Louis*, 122 U.S. 528, 534 (1887); OCC Interpretive Letter No. 610, reprinted in [1992-1993 Transfer Binder] CCH Fed. Banking L. Rep. 83,448 (Oct. 8, 1992).

20. Under the Uniform Commercial Code, a bank that accepts a check for deposit warrants to the drawee bank that all indorsements on the check are genuine, and the bank is liable to the drawee bank for the amount of the check plus expenses and lost interest if an indorsement on the check was forged. *See, e.g.*, N.Y. U.C.C. § 4–207 (McKinney 1991).

21. *See* Letter from William B. Glidden, OCC Assistant Director, dated Dec. 5, 1985; *see also* Acceptance of Signature Guarantees from Eligible Guarantor Institutions, Exchange Act Rel. No. 29,663, [1983-1984 Transfer Binder] Fed. Sec. L. Rep. (CCH) 84,825, at 82,119 (Sept. 9, 1991); U.S. League of Savings Associations, SEC No-Action Letter, [1982-1983 Transfer Binder] Fed. Sec. L. Rep. (CCH) 77,412, at 78,500 (Apr. 29, 1983). Broker-dealer subsidiaries of bank holding companies also have provided signature guarantees.

22. *See, e.g.*, N.Y. U.C.C. § 8–306(a) and (b) (McKinney 1999).

23. A bank issuing a signature guarantee is liable to the issuer of the security or its transfer agent for any loss that results from a breach of any of these warranties by the bank. *See, e.g.*, N.Y. U.C.C. § 8–306(h) (McKinney 1999).

24. Article 4A of the Uniform Commercial Code, in fact, encourages banks to develop and maintain commercially reasonable security procedures, such as algorithms or other encryption devices, for authenticating the identity of customers that transmit wire transfer instructions to the bank. *See, e.g.*, N.Y. U.C.C. § 4-A-202 (McKinney 1999).

25. *See* 12 C.F.R. 225.28(b)(2)(iii); *Barnett Banks of Florida, Inc.*, 71 *Federal Reserve Bulletin* 648 (1985); OCC Unpublished Interpretive Letter dated March 26, 1982.

26. *See Chase Letter*; OCC Conditional Approval No. 267 (Jan. 12, 1998).

27. *See* 12 C.F.R. 225.28(b)(2) and (14). Under Regulation Y, a bank holding company may develop and sell hardware and software that is designed and marketed for the processing and transmission of financial, banking, or economic data, and may develop and sell general purpose hardware so long as such general purpose hardware does not constitute more than 30 percent of the cost of any packaged offering. *See* 12 C.F.R. 225.28(b)(14).

28. 12 C.F.R. 225.21(a)(2).

and software, will comply with the Board's regulations and interpretations. In light of the nature of these additional activities, the fact that they would be conducted only in connection with the CA activities of Identrus and Notificants, and all other facts of record, the Board concludes that these activities are encompassed within the activities previously approved by the Board by regulation or are incidental to the permissible CA activities of Identrus and Notificants and, therefore, are permissible under Regulation Y.[29]

Other Considerations

In order to approve the notices, the Board also must determine that the performance of the proposed activities by Notificants and Identrus "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."[30] As part of its evaluation of these factors, the Board considers the financial and managerial resources of Notificants and their subsidiaries, and the effect the transaction would have on such resources.[31] The Board notes that each Notificant maintains capital equivalent to the capital levels that would be required of a U.S. banking organization. Based on all the facts of record, including confidential examination reports and financial information submitted by Notificants, the Board has concluded that financial and managerial considerations are consistent with approval of the proposal.

The Board has carefully considered the possibility that Identrus, Notificants, and their customers could expose themselves to the risks of electronic interception, interference, and fraud by operating and participating in a system that provides digital certification services for transactions conducted over open electronic networks like the Internet. The Board has carefully considered the proposal in light of these risks and the policies and procedures that the Identrus System would use to mitigate such risks. The Board notes that an organization would be eligible to become a Participant in the Identrus System only if it provides financial services, is regulated and examined by a government authority in its home country, meets minimum capital standards, and has a minimum long-term debt rating. Identrus and Notificants also intend to use sophisticated cryptographic methods to seek to ensure the security of digital certificates and to adopt a highly secure root CA technology.

In addition, as noted above, Participants and customers would be required to enter into written contracts that carefully define the functions, responsibilities, and scope of liability of the relevant parties and require the Participant and customer to comply with the operating rules of Identrus before they are permitted to participate in the Identrus System.[32] Each digital certificate issued by a Participant would indicate that the recipient of the certificate may not rely on the certificate unless the recipient purchases a separate warranty from the Participant issuing the certificate. Furthermore, Identrus proposes to (i) establish limits on each Participant's per transaction and aggregate warranty exposure and monitor each Participant's compliance with these limits, (ii) require Participants to provide collateral to secure their warranty exposure and monitor compliance with such collateral requirements, and (iii) maintain a comprehensive auditing system that would monitor the adherence of Participants to the Identrus operating rules and technical standards.

The Board recognizes that neither the cryptographic methods employed by Identrus nor any other security system can provide absolute protection against the risks noted above. The nature of these risks is not different, however, from those to which more traditional banking operations are exposed in other forms. The Board expects banking organizations considering whether to act as CAs to analyze carefully the associated risks, and to evaluate carefully whether those risks are consistent with their policies relating to the security of customer information and other data.[33] The Board believes that such analyses and evaluations would mitigate the risk that acting as a CA would result in unsound banking practices.[34]

The Board also has carefully considered the competitive effects of the proposal. Notificants do not currently act as CAs in the United States, and consummation of the proposal would increase competition in the market for CA services. In addition, the Board notes that the Identrus System would permit Notificants and other Participants in

29. Notificants may engage in data processing and data transmission activities, including the development and sale of hardware and software, pursuant to this order only to the extent such activities are necessary to permit the proper operation of the Identrus System. Notificants and Identrus also must conduct their data processing and data transmission activities subject to the software and hardware limitations contained in Regulation Y.

30. 12 U.S.C. § 1843(c)(8).

31. *See* 12 C.F.R. 225.26(b).

32. Notificants have indicated that the Identrus System is in the process of finalizing its operating rules, including the technical specifications for the system, and sample Participant and customer agreements. The Board has carefully reviewed the Identrus System's draft operating rules and agreements, and Notificants have committed to provide the Federal Reserve System with the final version of the operating rules (including the technical specifications) and sample Participant and customer agreements prior to commencing operations.

33. The Board notes that Identrus has engaged an independent public accounting firm to conduct a detailed risk analysis of the Identrus System. Moreover, Notificants have agreed to treat Identrus as a subsidiary for purposes of the BHC Act, and Identrus has committed to include a provision in any contract with a vendor that provides services covered by the Bank Service Company Act (12 U.S.C. § 1861 *et seq.*) indicating that the Identrus-related operations of that vendor will be subject to the examination and regulatory authority of the Board.

34. Notificants have committed that neither Notificants nor Identrus will represent that the Board's approval of these notices constitutes an endorsement of Notificants' or Identrus's products or services by the Federal Reserve System, and neither Notificants nor Identrus will indicate in any of their marketing efforts or materials, either oral or written, that the Federal Reserve System assures or has approved or endorsed the security, functionality, or effectiveness of the products or services offered by Notificants or Identrus.

the Identrus System to compete with each other to provide CA and related services to customers.

Notificants have stated that consummation of the proposal would facilitate the use of the Internet and other open electronic networks for business-to-business electronic commerce, and allow companies to reduce the transaction costs associated with doing business. The Board also believes that consummation of the proposal would enhance the ability of Notificants to meet the needs of their customers. In addition, as the Board previously has noted, there are public benefits to be derived from permitting capital markets to operate so that banking organizations can make potentially profitable investments in nonbanking companies and from permitting banking organizations to allocate their resources in the manner they consider to be most efficient when such investments and actions are consistent, as in this case, with the relevant considerations under the BHC Act.[35]

Based on the foregoing and all other facts of record, the Board has determined that consummation of the proposal can reasonably be expected to produce benefits to the public that outweigh any potential adverse effects of the proposal. Accordingly, based on all the facts of record, the Board has determined that the balance of public interest factors that the Board must consider under the proper incident to banking standard of section 4(c)(8) of the BHC Act is favorable and consistent with approval.

Conclusion

Based on the foregoing and all the facts of record, the Board has determined that the proposal should be, and hereby is, approved. The Board's approval is specifically conditioned on compliance by Notificants with all the commitments made in connection with the notices, including the commitments discussed in this order, and the conditions set forth in this order. The Board's determination also is subject to all the conditions set forth in Regulation Y, including those in sections 225.7 and 225.25(c) of Regulation Y (12 C.F.R. 225.7 and 225.25(c)), and to the Board's authority to require such modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to ensure compliance with, or to prevent evasion of, the provisions of the BHC Act and the Board's regulations and orders issued thereunder. These commitments and conditions are deemed to be conditions imposed in writing by the Board in connection with its findings and decision, and, as such, may be enforced in proceedings under applicable law. This proposal shall not be consummated later than three months after the effective date of this order, unless such period is extended for good cause by the Board or by the appropriate Federal Reserve Bank, acting pursuant to delegated authority.

By order of the Board of Governors, effective November 10, 1999.

35. *See, e.g., Banc One Corporation*, 84 *Federal Reserve Bulletin* 553 (1998).

Voting for this action: Chairman Greenspan, Vice Chairman Ferguson, and Governors Kelley, Meyer, and Gramlich.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

J.P. Morgan & Co. Incorporated
New York, New York

UBS AG
Zurich, Switzerland

Order Approving Notices to Engage in Nonbanking Activities

J.P. Morgan & Co. Incorporated ("JPM"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), and UBS AG ("UBS"), a foreign banking organization subject to the BHC Act, have requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24) to acquire or retain more than 5 percent of the voting interests in TP Group LDC, Grand Cayman, Cayman Islands ("TP Group"), and its majority owned subsidiary, Tradepoint Financial Networks plc, London, United Kingdom ("Tradepoint"), and thereby engage in operating a securities exchange.

Notice of the proposals, affording interested persons an opportunity to submit comments, has been published (64 *Federal Register* 46,196, 48,397, and 48,643 (1999)). The time for filing comments has expired, and the Board has considered the notices and all comments received in light of the factors set forth in section 4(c)(8) of the BHC Act.

JPM, with total consolidated assets of $269 billion, is the fifth largest banking organization in the United States. UBS, with total consolidated assets of $583 billion, is the largest banking organization headquartered in Switzerland.[1] UBS operates branches in Los Angeles and San Francisco, California; Stamford, Connecticut; Chicago, Illinois; and New York, New York, and agencies in Miami, Florida; and Houston, Texas. JPM and UBS also engage through subsidiaries in a broad range of nonbanking activities in the United States and worldwide.

JPM proposes to control approximately 17 percent of the voting shares of TP Group, and UBS proposes to control approximately 11 percent of the voting shares of TP Group.[2] TP Group owns approximately 54.1 percent of

1. Asset data are as of June 30, 1999, and ranking data are as of December 31, 1998.

2. JPM currently owns directly and indirectly an approximately 16 percent nonvoting interest in TP Group and UBS currently owns a 10.79 percent voting interest in TP Group. JPM and UBS acquired these interests in July 1999 in reliance on section 4(c)(13) of the BHC Act and the Board's Regulation K (12 C.F.R. Part 211). On consummation of the proposal, JPM would convert its entire non-voting interest in TP Group into a voting interest in the organization. In connection with this conversion, JPM also would acquire an addi-

the outstanding voting shares of Tradepoint, which operates the Tradepoint Stock Exchange ("Exchange"), an electronic securities exchange for the secondary trading of equity and equity-related securities listed on the London Stock Exchange. JPM and UBS also have stated that Tradepoint anticipates establishing an office or subsidiary in the United States. In light of these proposed actions, JPM and UBS have requested the Board's approval under section 4(c)(8) of the BHC Act to control their interests in TP Group.[3]

The Exchange is a screen-based electronic market that provides securities trade matching, execution, and related services to U.S. and foreign market-makers, broker-dealers, and institutional investors that become members of the Exchange.[4] Currently, members may access the Exchange and enter bid and ask quotes through electronic terminals linked to certain financial networks (*e.g.*, a Bloomberg terminal) or through a personal computer linked directly to the Exchange. Terminals linked to the Exchange can be located anywhere in the world, though trading currently may occur only during U.K. business hours.[5] Orders entered into the Exchange's system are displayed on separate electronic order books for each security, which displays, in descending order, the best bid and ask quotations for the security. The Exchange automatically and continuously matches equal bid and ask offers for each listed security on a first-come, first-served basis.[6]

Tradepoint does not take a principal position in securities, clear or settle the securities transactions executed on the Exchange, or assume any principal risk for securities trades executed on the Exchange. Tradepoint and its shareholders also are under no obligation to guarantee a member's trades. Each member of the Exchange is required to be a member of the London Clearing House, or to appoint a member of the London Clearing House to clear the member's trades on the Exchange. Trades matched by the Exchange are registered at the end of each business day with the London Clearing House in the name of the appropriate clearing member. The London Clearing House then becomes the counterparty to each side of the trade until it is settled. Settlement occurs through the CREST system, which is operated by CRESTCo., a corporation established by the Bank of England for the settlement of uncertificated U.K. equities.[7] Tradepoint is not affiliated with the London Clearing House or CRESTCo.

The Exchange is a recognized investment exchange under Section 37(3) of the U.K. Financial Services Act 1986, and is regulated and supervised by the U.K. Financial Services Authority ("FSA") under the securities laws of the United Kingdom. Although Tradepoint makes its services available to customers in the United States, the Securities and Exchange Commission ("SEC") has granted Tradepoint a limited volume exemption from the registration requirements of section 5 of the Securities Exchange Act of 1934 ("1934 Act").[8] The SEC's exemptive order permits Tradepoint to operate in the United States without registering as a securities exchange so long as (i) the Exchange's average daily dollar value of trades involving U.S. members does not exceed $40 million, and (ii) the Exchange's worldwide average daily volume does not exceed 10 percent of the average daily trading volume on the London Stock Exchange. The SEC's exemptive order also requires that the Exchange comply with a number of other conditions designed to protect U.S. investors and to ensure fair and orderly markets.

Closely Related to Banking Standard

Section 4(c)(8) of the BHC Act provides that a bank holding company may, with Board approval, engage in any activity that the Board determines to be "so closely related to banking or managing or controlling banks as to be a proper incident thereto." In considering whether an activity is closely related to banking, the Board and the courts look to whether banks generally (1) conduct the proposed activity, (2) provide services that are operationally or functionally so similar to the proposed services as to equip them particularly well to provide the proposed services, or (3) provide services that are so integrally related to the proposed services as to require their provision in a specialized form.[9]

The Board has not previously determined by regulation or order that operating a securities exchange is closely related to banking within the meaning of section 4(c)(8) of the BHC Act. The principal function of a securities exchange is to provide a centralized facility for the execution,

tional 1 percent of TP Group's shares from a third party. After the share conversion and purchase, JPM would control approximately 17 percent of the voting shares of TP Group.

3. A bank holding company must obtain the Board's approval under section 4(c)(8) of the BHC Act if a foreign company held by the bank holding company seeks to engage in business in the United States.

4. As of June 30, 1999, the Exchange had approximately 92 members. Unlike many U.S. securities exchanges, the Exchange is not owned by its members but rather by its shareholders, which may or may not be members of the exchange.

5. The Exchange's current trading hours are Monday to Friday, 7:30 A.M. to 5:30 P.M. London time, with a post-trade administration session from 5:30 P.M. to 6:00 P.M.

6. The Exchange also has the capacity to operate periodic auctions. In a periodic auction, bid and ask quotations would be allowed to accumulate and then filled, to the extent possible, at a single price calculated to match the largest possible number of accumulated buy and sell orders. The Exchange does not currently operate periodic auctions but may do so in the future for infrequently traded securities or the securities of smaller capitalization issuers.

7. Cross trades executed on the Exchange are not registered with the London Clearing House and are settled directly by the relevant member through CREST. Cross trades are trades where the buyer and seller are both customers of the same Exchange member.

8. 15 U.S.C. § 78e; *see* Tradepoint Financial Networks plc, Exchange Act Release No. 41,199, 1999 SEC LEXIS 612 (March 22, 1999).

9. *See National Courier Association v. Board of Governors of the Federal Reserve System*, 516 F.2d 1229, 1237 (D.C. Cir. 1975). The Board may also consider any other basis that may demonstrate that the proposed activity has a reasonable or close connection or relationship to banking or managing or controlling banks. *See* Board Statement Regarding Regulation Y, 49 *Federal Register* 806 (1984); *Securities Industry Association v. Board of Governors of the Federal Reserve System*, 468 U.S. 207, 210–211 n.5 (1984).

clearance, and settlement of securities transactions.[10] Banks and bank holding companies currently are authorized to provide securities brokerage services to their customers and, as part of these services, to execute and clear such transactions on a securities exchange.[11] Bank holding company subsidiaries authorized to act as a dealer in securities ("section 20 subsidiaries") also may provide securities execution, clearance, and settlement services in connection with their dealer operations.[12] In addition, subsidiaries of banks and bank holding companies that act as a broker or dealer frequently become members of securities exchanges and, in the case of mutually owned exchanges such as the New York Stock Exchange ("NYSE"), acquire small (less than 5 percent) ownership interests in the exchange. Through these relationships, banks and bank holding companies have gained extensive experience with and knowledge of the rules and operations of securities exchanges.

Banks and bank holding companies also provide services that are functionally and operationally similar to those provided by the Exchange. Subsidiaries of banks and bank holding companies acting as a securities broker may execute cross-trades for their customers and thereby match equal bid and offer orders received from their customers. In addition, section 20 subsidiaries of bank holding companies may act as a specialist or market-maker on a securities exchange, such as the NYSE or NASDAQ.[13] A specialist generally maintains a book of current buy and sell orders received from other brokers and matches equal bid and offer quotes for execution.[14] Market-makers for a security on the NASDAQ securities exchange also publish bid and offer prices at which they stand ready to execute transactions in the relevant security, either for their own account or for the account of customers. In addition, a market-maker receives customer orders and matches them, to the extent possible, against an order received from another customer or against an order for the market-maker's own account.

For these reasons, and based on all the facts of record, the Board concludes that operating a securities exchange is an activity that is closely related to banking for purposes of section 4(c)(8) of the BHC Act.

Proper Incident to Banking Standard and Other Considerations

In order to approve the proposal, the Board also must determine that the proposed activities are a proper incident to banking, that is, that performance of the proposed activities "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."[15] As part of its evaluation of these factors, the Board considers the financial condition and managerial resources of the notificant and its subsidiaries and the effect the transaction would have on those resources.[16]

In considering the financial resources of the notificants, the Board has carefully reviewed the capitalization of JPM and UBS and has found the capitalization of each to be consistent with approval. In particular, the Board notes that JPM and its subsidiary bank, Morgan Guaranty Trust Company, New York, New York, are well capitalized and would remain so after consummation of the proposal, and that UBS's capital ratios satisfy applicable risk-based standards established under the Basle Accord, and are considered equivalent to the capital levels that would be required of a U.S. banking organization. The Board also has considered recent financial statements of JPM and UBS, including *pro forma* financial statements and other available information, and the condition of the U.S. operations of UBS.

Furthermore, as noted above, Tradepoint does not take a principal position in any security and does not assume any principal risk for the clearance or settlement of securities transactions executed on the Exchange. In addition, JPM and UBS would not guarantee any securities transactions executed on the Exchange. Based on these and other facts of record, including relevant supervisory information, the Board has determined that financial and managerial considerations are consistent with approval.

The Board also has carefully considered the competitive effects of the proposal. There are numerous existing and potential competitors for the proposed services. Accordingly, the Board concludes that consummation of the proposal would have a *de minimis* effect on competition.

In considering the potential for conflicts of interests and other adverse effects, the Board also has carefully reviewed the operational and supervisory framework within which the Exchange operates. As noted above, the Exchange is subject to regulation by the FSA under the securities laws of the United Kingdom, and its U.S. activities are subject to regulation by the SEC under the federal securities laws. U.K. law requires that recognized investment exchanges, such as the Exchange, promote and maintain high standards of integrity and fair dealing.[17] In furtherance of this requirement, the FSA has adopted a code of conduct gov-

10. The operations of the Exchange are more limited than many securities exchanges in that the Exchange does not directly or indirectly clear or settle securities transactions executed on the Exchange. Rather, the Exchange maintains systems to route trades to the London Clearing House for clearance and settlement through CREST.

11. *See* 12 C.F.R. 225.28(b)(7)(i); *BankAmerica Corporation*, 69 *Federal Reserve Bulletin* 105 (1983). *See also* 12 U.S.C. § 24 (Seventh); OCC Interp. Letter No. 622 (April 9, 1993).

12. *See J.P. Morgan & Co., Inc. et al.*, 75 *Federal Reserve Bulletin* 192 (1989), *aff'd sub nom. Securities Industry Ass'n v. Board of Governors*, 900 F.2d 360 (D.C. Cir. 1990); *First of America Corporation*, 80 *Federal Reserve Bulletin* 1120 (1994).

13. *See, e.g., Fleet Financial Group*, 84 *Federal Reserve Bulletin* 227 (1998); *Dresdner Bank AG*, 82 *Federal Reserve Bulletin* 850 (1996).

14. *See* 5 L. Loss & J. Seligman, *Securities Regulation* 2513–14 (3d ed. 1990); New York Stock Exchange Rule 104.

15. *See* 12 U.S.C. § 1843(c)(8).

16. *See* 12 C.F.R. 225.26.

17. *See* Financial Services Act of 1986, sch. 4, par. 5.

erning recognized investment exchanges that is designed to ensure that the decisions of an exchange are not improperly influenced by conflicts of interest. Staff of the FSA has advised Board staff that the FSA could take supervisory action against a recognized investment exchange under U.K. law if the exchange sought to deny a person access to the exchange on the basis of an improper conflict of interest.

The U.K. Financial Services Act of 1986 also requires that the Exchange have financial resources sufficient to support its activities, and maintain rules and procedures to ensure that trading is conducted in an orderly manner and consistent with the protection of investors.[18] Pursuant to these requirements, Tradepoint has established rules for the Exchange that govern the admission of members, establish standard terms for the execution of securities transactions on the Exchange, and provide sanctions for noncompliance with the Exchange's rules. The FSA has reviewed the Exchange's rules and determined that they are consistent with the requirements of U.K. law and must review any proposed amendments to such rules.[19]

Tradepoint's operations in the United States also would remain subject to the antifraud provisions of the federal securities laws.[20] Although the SEC has granted Tradepoint a limited volume exemption from the registration requirements of section 5 of the 1934 Act, the SEC's exemptive order requires that Tradepoint comply with a number of conditions designed to ensure the maintenance of fair and orderly markets in the United States and the protection of U.S. investors. For example, these conditions permit the SEC to monitor the Exchange for compliance with the antifraud and other applicable provisions of the federal securities laws; require the Exchange to adopt and implement procedures to ensure the nondisclosure of confidential, material information held by the Exchange; and allow the SEC to obtain access to the books, records (including copies of membership applications and standards for admission as a member), facilities, and personnel of the Exchange as necessary or appropriate. Based on these and other conditions, the SEC concluded that the limited volume exemption provided the Exchange was consistent with the public interest and the protection of investors.[21]

Notificants have stated that consummation of the proposal would increase competition for the execution of equity and equity-related securities listed on the London Stock Exchange and provide added convenience to market-makers, broker-dealers, and institutional investors that seek to execute trades in such securities. The SEC also has stated that the Exchange's services provide U.S. investors with a lower-cost method of investing in foreign securities. In addition, the Board has noted that there are public benefits to be derived from permitting capital markets to operate so that bank holding companies can make potentially profitable investments in nonbanking companies and from permitting banking organizations to allocate their resources in the manner they consider to be most efficient when such investments and actions are consistent, as in this case, with the relevant considerations under the BHC Act.

Based on all the facts of record, the Board has determined that consummation of the proposal can reasonably be expected to produce public benefits that outweigh any potential adverse effects of the proposal, and therefore that the performance of the proposed activity by JPM and UBS is a proper incident to banking for purposes of section 4(c)(8) of the BHC Act.[22]

Conclusion

Based on the foregoing and all the facts of record, including the commitments made by notificants in connection with the notices, and subject to the terms and conditions set forth in this order, the Board has determined that the notices should be, and hereby are, approved. The Board's determination is subject to all the conditions set forth in the Board's Regulation Y, including those in sections 225.7 and 225.25(c) (12 C.F.R. 225.7 and 225.25(c)), and to the Board's authority to require modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to ensure compliance with, or to prevent evasion of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder. The Board's decision is specifically conditioned on compliance with all the commitments made in the notices, including the commitments and conditions discussed in this order. The commitments and conditions relied on in reaching this decision shall be deemed to be conditions imposed in writing by the Board in connection with its findings and decision and, as such, may be enforced in proceedings under applicable law.

By order of the Board of Governors, effective November 8, 1999.

This action was taken pursuant to the Board's Rules Regarding Delegation of Authority (12 C.F.R. 265.4(b)(1)) by a committee of Board members. Voting for this action: Vice Chairman Ferguson and

18. *See* Financial Services Act of 1986, sch. 4, pars. 1 and 2.

19. The FSA has the authority to conduct on-site inspections of the Exchange if necessary or appropriate.

20. *See, e.g.*, 15 U.S.C. § 78j(b).

21. JPM and UBS also have committed that Tradepoint will be considered a subsidiary for purposes of the BHC Act, and as an affiliate of any insured depository institution affiliate of the notificants for purposes of sections 23A and 23B of the Federal Reserve Act.

22. Regulation Y provides that a bank holding company must seek the Board's approval prior to altering in any material respect a nonbanking activity previously approved by the Board. *See* 12 C.F.R. 225.25(c)(3). As noted above, the Exchange does not currently clear or settle securities transactions executed on the Exchange. Because the clearance and settlement of securities transactions involves risks that are materially different from the risks associated with the execution of securities transactions, notificants must separately seek the Board's approval if the Exchange in the future proposes to clear or settle securities transactions to permit the Board to determine whether the performance of such additional activities by the Exchange would constitute a proper incident to banking under section 4(c)(8) of the BHC Act.

Governors Kelley and Gramlich. Absent and not voting: Chairman Greenspan and Governor Meyer.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

ORDERS ISSUED UNDER BANK MERGER ACT

SunTrust Bank
Atlanta, Georgia

Order Approving Merger of Banks

SunTrust Bank, Atlanta, Georgia ("SunTrust-Atlanta"), a state member subsidiary bank of SunTrust Banks, Inc., Atlanta, Georgia ("SunTrust"), has applied under section 18(c) of the Federal Deposit Insurance Act (12 U.S.C. § 1828(c)) ("Bank Merger Act") to merge with SunTrust's twenty-six wholly owned subsidiary banks ("Merging Banks"),[1] and to retain and operate branches at the locations of the main offices and branches of the Merging Banks.

Notice of the application, affording interested persons an opportunity to submit comments, has been given in accordance with the Bank Merger Act and the Board's Rules of Procedure (12 C.F.R. 262.3(b)). As required by the Bank Merger Act, reports on the competitive effects of the merger were requested from the United States Attorney General and the other federal banking agencies. The time for filing comments has expired, and the Board has considered the application and all the facts of record in light of the factors set forth in the Bank Merger Act.

SunTrust is the largest commercial banking organization in Georgia, controlling deposits of $10.4 billion, representing 23.4 percent of the total deposits in commercial banking organizations in Georgia.[2] It also is the 14th largest commercial banking organization in Alabama, controlling deposits of $298.1 million, representing less than 1 percent of the total deposits in commercial banking organizations in Alabama; the largest commercial banking organization in Florida, controlling deposits of $20.4 billion, representing 33.1 percent of the total deposits in commercial banking organizations in Florida; the fourth largest commercial banking organization in Tennessee, controlling deposits of $5.7 billion, representing 7.4 percent of the total deposits in commercial banking organizations in Tennessee; and the largest commercial banking organization in Virginia, controlling deposits of $18.6 billion, representing 34.5 percent of the total deposits in commercial banking organizations in Virginia. This proposal represents a reorganization of SunTrust's existing banking operations and, therefore, the Board concludes that consummation of the proposal would not have any significantly adverse effects on competition or on the concentration of banking resources in any relevant banking market.

1. The Merging Banks are listed in the appendix.
2. All banking data are as of June 30, 1998.

Riegle-Neal Analysis

Section 102 of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 ("Riegle-Neal Act") (Pub. L. No. 103–328, 108 Stat. 2338 (1994)) authorizes a bank to conduct an interstate merger with another bank unless, prior to June 1, 1997, the home State of one of the banks involved in the transaction has adopted a law expressly prohibiting merger transactions involving out-of-state banks.[3] The Riegle-Neal Act also authorizes the acquiring bank to retain and operate, as a main office or branch, any bank offices of the acquired bank.[4]

All the states involved in the proposal, Alabama, Florida, Georgia, Tennessee, and Virginia, have enacted legislation allowing interstate mergers between banks located in their states and out-of-state banks pursuant to the provisions of the Riegle-Neal Act on or after June 1, 1997.[5] SunTrust-Atlanta has notified the appropriate state banking agencies regarding its proposal to consolidate its banking operations and has provided a copy of its Bank Merger Act application to all the relevant state agencies. In light of the foregoing, it appears that the proposal complies with the requirements of the Riegle-Neal Act.[6]

Financial and Managerial Considerations

In reviewing this proposal under the Bank Merger Act, the Board also has considered the financial and managerial resources and future prospects of the institutions involved. The Board has reviewed these factors in light of the facts of record, including supervisory reports of examination assessing the financial and managerial resources of SunTrust-Atlanta and the Merging Banks. Based on all the facts of record, and because the proposal represents the reorganization of banking operations already under common control, the Board concludes that the financial and managerial resources and future prospects of SunTrust-Atlanta and the Merging Banks are consistent with approval of the proposal.

Convenience and Needs Considerations

The Board received a comment from the Coalition of Black Business Enterprises and Organizations of Albany,

3. 12 U.S.C. § 1831u(a)(1) (1994).
4. 12 U.S.C. § 1831u(d)(1) (1994).
5. *See* Ala. Code §§ 5–13B-22, 23 (effective May 31, 1997); Fla. Stat. Ch. 658.2953 (effective May 31, 1997); Ga. Code Ann., Fin. Inst. § 7–1-628.3 (effective June 1, 1997); Tenn. Code Ann § 452- 1402 *et seq.* (effective June 1, 1997); and Va. Code Ann. § 6.1–44.1 *et seq.* (effective March 16, 1995).
6. All the conditions for an interstate merger enumerated in Riegle-Neal would be met in this case. Each bank involved in the transaction is adequately capitalized and the resulting bank will continue to be adequately capitalized and adequately managed on consummation of this proposal. SunTrust-Atlanta and all affiliated depository institutions would not control more than 10 percent of the total amount of deposits of insured depository institutions in the United States and this corporate reorganization would not cause an increase in the percentage of deposits controlled by SunTrust in any state.

Georgia ("Protestant"), maintaining that one of the Merging Banks, SunTrust Bank, South Georgia, N.A., Leesburg, Georgia ("SunTrust-Leesburg"), does not provide needed services or make adequate efforts to meet the credit needs of consumers who live in low- and moderate-income ("LMI") census tracts of Albany, Georgia. Specifically, Protestant states that African Americans, particularly small business owners in low-income census tracts, are harmed by "redlining" and indifference on the part of SunTrust-Leesburg.[7]

The Board has long held that consideration of the convenience and needs factor includes a review of the records of the relevant depository institutions under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA"). As provided in the CRA, the Board has evaluated this factor in light of examinations by the primary federal supervisors of the CRA performance of the relevant institutions. An institution's most recent CRA performance evaluation is a particularly important consideration in the applications process because it represents a detailed, on-site evaluation of the institution's overall record of performance under the CRA by its primary federal supervisor.[8] 54 *Federal Register* 23,618 and 23,641 (1999).

The results of these examinations indicate that SunTrust's depository institution subsidiaries, including SunTrust-Leesburg, are helping to meet the convenience and needs of the communities they serve. Each of SunTrust's depository institutions received a rating of "satisfactory" or higher at its last CRA performance examination, with nine banks receiving an "outstanding" rating. Examiners found that the CRA-related investments made by SunTrust-Atlanta and the Merging Banks exhibited a high level of responsiveness to the credit needs of the communities, the banks' branch networks were accessible to most segments of the communities they served, and the banks provided a significant number and variety of community development services.

SunTrust-Leesburg, which provides products and services to the area identified by Protestant, received a "satisfactory" rating on its most recent CRA performance examination as of July 30, 1997, by the Office of the Comptroller of the Currency ("OCC"). In SunTrust-Leesburg's 1997 CRA performance examination, OCC examiners found that the level of lending by the bank throughout its assessment area was responsive to the community's credit needs and that no conspicuous gaps existed in the loan penetration of geographies. Examiners determined that SunTrust-Leesburg had good loan penetration in low-income geographies throughout its assessment area. OCC examiners also considered SunTrust-Leesburg's level of lending in the Albany, Georgia, Metropolitan Statistical Area ("Albany MSA")[9] good and responsive to the credit needs in the MSA.[10]

SunTrust-Leesburg had a good record of serving the credit needs of the small businesses throughout its assessment area. Specifically, examiners found that in the assessment area, 84 percent of SunTrust-Leesburg's small business loans were in amounts of $100,000 or less, and that 89 percent of the bank's small business loans were to businesses with gross revenues of less than $1,000,000. In the Albany MSA, 32 percent of SunTrust-Leesburg's small business loans were in LMI geographies. OCC examiners concluded that SunTrust-Leesburg's small business lending in the Albany MSA was adequate, noting that 39 percent of that MSA's small businesses were in LMI geographies.[11] Examiners also considered SunTrust-Leesburg's performance in small farm lending to be adequate; SunTrust-Leesburg made 21 percent of its small farm loans in LMI geographies in its assessment area. Approximately 26 percent of the farms in the assessment area were in LMI geographies.

SunTrust-Leesburg reports that it helps to meet the credit needs of its assessment areas through participation in several community development organizations, including Albany Community Together ("ACT"), Georgia Development Authority ("GDA"), and Community Development Center ("CDC"). SunTrust-Leesburg has committed to invest $1 million in ACT, which is organizing a small business revolving loan fund. GDA originates small farm loans throughout Georgia, and CDC provides small business loans in the city of Albany. SunTrust-Leesburg has committed $110,000 to Vision Albany, an initiative to promote community development in Albany and Dougherty Counties. SunTrust-Leesburg representatives assist these organizations in providing services in the bank's assessment areas.

7. Protestant further alleges that the CRA performance deficiencies of SunTrust-Leesburg result from the lack of minority representation on SunTrust-Leesburg's board of directors and its management and staff. The Bank Merger Act does not authorize the Board to adjudicate disputes that arise in areas of employment discrimination or to monitor the racial composition of the board of directors, management, or staff of an organization. Under the regulations of the Department of Labor, SunTrust and SunTrust-Leesburg are required to file reports with the Equal Employment Opportunity Commission ("EEOC") covering all employees, and the EEOC has jurisdiction to determine whether companies are in compliance with equal employment opportunity statutes. *See* 41 C.F.R. 60–1.7(a), 60–1.40.

8. The Interagency Questions and Answers Regarding Community Reinvestment provide that an institution's most recent CRA performance evaluation is an important consideration in the applications process because it represents a detailed on-site evaluation of the institution's overall record of performance under the CRA by the appropriate federal financial supervisor.

9. SunTrust-Leesburg includes the Albany MSA as one of its four assessment areas. All seven of the low-income census tracts in SunTrust-Leesburg's assessment areas are in the city of Albany. In addition, five of the nineteen moderate-income geographies in SunTrust-Leesburg's assessment areas are in the city of Albany.

10. SunTrust-Atlanta states that in 1998, SunTrust-Leesburg made more than 50 percent of the loans to African American borrowers in the Albany MSA's low-income census tracts that were reported by local depository institutions under the Home Mortgage Disclosure Act.

11. SunTrust-Atlanta states that SunTrust-Leesburg's small business loan efforts have resulted in the bank making approximately 30 percent of the total business loans in amounts of less than $100,000 and 50 percent of the business loans between $100,000 and $250,000 in LMI census tracts of Albany from 1996 to 1998.

In reviewing the convenience and needs of the communities served by SunTrust-Leesburg, the Board also notes that the bank provides a full range of services, including commercial, agricultural, real estate, and consumer loans, trust services and a variety of community development services. SunTrust has stated that its internal reorganization will not adversely affect the provision of these services by SunTrust-Leesburg because the reorganization plan involves no branch closings or any other actions that might limit the bank's ability to serve the credit needs of its local communities.

The Board has carefully considered all the facts of record, including Protestant's comments, the response to those comments, the CRA performance records of SunTrust Bank-Atlanta and the Merging Banks, relevant reports from their primary federal regulators, and other supervisory information. Based on the facts of record, and for the reasons discussed above, the Board concludes that convenience and needs considerations, including the relevant banks' records of CRA performance, are consistent with approval of the proposal.

Conclusion

Based on the foregoing and all the facts of record, the Board has determined that the application should be, and hereby is, approved.[12] The Board's approval is specifically conditioned on compliance by SunTrust-Atlanta with all the commitments made in connection with the application. For purposes of this action, the commitments and conditions relied on in reaching this decision are conditions imposed in writing by the Board and, as such, may be enforced in proceedings under applicable law.

The proposed acquisition shall not be consummated before the fifteenth calendar day following the effective date of this order, or later than three months after the effective date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Atlanta, acting pursuant to delegated authority.

By order of the Board of Governors, effective November 18, 1999.

Voting for this action: Chairman Greenspan, Vice Chairman Ferguson, and Governors Kelley and Meyer. Absent and not voting: Governor Gramlich.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Appendix

Merging Banks:

Crestar Bank, Richmond, Virginia
SunTrust Bank, Alabama, N.A., Florence, Alabama
SunTrust Bank, Augusta, N.A., Augusta, Georgia
SunTrust Bank, Central Florida, N.A., Orlando, Florida
SunTrust Bank, Chattanooga, N.A., Chattanooga, Tennessee
SunTrust Bank, East Central Florida, Daytona Beach, Florida
SunTrust Bank, East Tennessee, N.A., Knoxville, Tennessee
SunTrust Bank, Gulf Coast, Sarasota, Florida
SunTrust Bank, Miami, N.A., Miami, Florida
SunTrust Bank, Mid-Florida, N.A., Winter Haven, Florida
SunTrust Bank, Middle Georgia, N.A., Macon, Georgia
SunTrust Bank, Nashville, N.A., Nashville, Tennessee
SunTrust Bank, Nature Coast, Brooksville, Florida
SunTrust Bank, North Central Florida, Ocala, Florida
SunTrust Bank, North Florida, N.A., Jacksonville, Florida
SunTrust Bank, Northeast Georgia, N.A., Athens, Georgia
SunTrust Bank, Northwest Florida, Tallahassee, Florida
SunTrust Bank, Northwest Georgia, N.A., Rome, Georgia
SunTrust Bank, Savannah, N.A., Savannah, Georgia
SunTrust Bank, South Central Tennessee, N.A., Pulaski, Tennessee
SunTrust Bank, South Florida, N.A., Fort Lauderdale, Florida
SunTrust Bank, South Georgia, N.A., Leesburg, Georgia
SunTrust Bank, Southeast Georgia, N.A., Brunswick, Georgia
SunTrust Bank, Southwest Florida, Fort Myers, Florida
SunTrust Bank, Tampa Bay, Tampa Bay, Florida
SunTrust Bank, West Georgia, N.A., Columbus, Georgia

ORDERS ISSUED UNDER INTERNATIONAL BANKING ACT

Bank Austria Aktiengesellschaft Vienna, Austria

Order Approving Establishment of a Branch and Representative Offices

Bank Austria Aktiengesellschaft ("Bank"), Vienna, Austria, a foreign bank within the meaning of the International Banking Act ("IBA"), has applied under section 7(d) of the IBA (12 U.S.C. § 3105(d)) to establish a federally licensed branch in Greenwich, Connecticut. Bank has also

12. Protestant requested that several public meetings or hearings be held on this matter in Albany, Georgia. The Bank Merger Act does not require the Board to hold a public hearing on an application. Under its rules, the Board may, in its discretion, hold a public meeting or hearing on an application if a meeting or hearing is necessary or appropriate to clarify factual issues related to the application and to provide an opportunity for testimony, if appropriate. *See* 12 C.F.R. 262.3(i). The Board has carefully considered Protestant's request in light of all the facts of record. Protestant has had ample opportunity to submit its views and Protestant's request for a public meeting or hearing fails to demonstrate why written comments would not adequately present Protestant's evidence. Protestant's request also fails to identify disputed issues of fact that are material to the Board's decision and that would be clarified by a public meeting or hearing. For these reasons, and based on all the facts of record, the Board has determined that a public meeting or hearing is not required or warranted in this case. Accordingly, Protestant's request is denied.

applied under section 10(a) of the IBA (12 U.S.C. § 3107(a)) to establish representative offices in Atlanta, Georgia; and San Francisco, California. The Foreign Bank Supervision Enhancement Act of 1991, which amended the IBA, provides that a foreign bank must obtain the approval of the Board to establish a branch or representative office in the United States.

Notice of the application, affording interested persons an opportunity to submit comments, was published on November 27, 1998, in a newspaper of general circulation in Greenwich, Connecticut (*Greenwich Time*); Atlanta, Georgia (*Atlanta Journal and Constitution*); and San Francisco, California (*San Francisco Chronicle*). The time for filing comments has expired, and the Board has considered the application and all comments received.

Bank, with total consolidated assets of $130 billion, is the largest bank in Austria.[1] Anteilsverwaltung-Zentralsparkasse ("AV-Z"), an Austrian holding company, is Bank's largest shareholder.[2] Bank engages directly and indirectly in a number of banking, financial, and other activities in Europe, Asia, and the United States. In the United States, Bank operates a federal branch in New York, New York; a representative office in Chicago, Illinois; and several nonbank subsidiaries. Bank is a qualifying foreign banking organization within the meaning of Regulation K (12 C.F.R. 211.23(b)).

In September 1998 Bank merged with Creditanstalt Aktiengesellschaft, Vienna, Austria, which, up until the merger, operated a branch in Greenwich, Connecticut; and representative offices in Atlanta, Georgia; and San Francisco, California. Bank has requested authority to retain and operate these offices through this application. Pursuant to Regulation K, the Board allowed the merger to proceed before an application to establish the offices was filed and acted on by the Board.[3]

In order to approve an application by a foreign bank to establish a branch or representative office in the United States, the IBA and Regulation K require the Board to determine that the foreign bank applicant engages directly in the business of banking outside of the United States, and has furnished to the Board the information it needs to assess the application adequately. The Board also shall take into account whether the foreign bank and any foreign bank parent are subject to comprehensive supervision or regulation on a consolidated basis by its home country supervisor (12 U.S.C. §§ 3105(d)(2), 3107(a)(2); 12 C.F.R. 211.24(d)(2), 211.24(c)(1)).[4] The Board may also take into account additional standards as set forth in the IBA and Regulation K (12 U.S.C. § 3105(d)(3)-(4); 12 C.F.R. 211.24(c)(2)-(3)).

As noted above, Bank engages directly in the business of banking outside the United States. Bank also has provided the Board with information necessary to assess the application through submissions that address the relevant issues. With respect to supervision by home country authorities, the Board previously has determined, in connection with applications involving other banks in Austria, that those banks were subject to home country supervision on a consolidated basis.[5] Bank is supervised by the Austrian Federal Ministry of Finance (the "Ministry") and the Austrian National Bank on substantially the same terms and conditions as those other banks. Based on all the facts of record, the Board has determined that Bank is subject to comprehensive supervision on a consolidated basis by its home country supervisor.

The Board also has taken into account the additional standards set forth in section 7 of the IBA and Regulation K (see 12 U.S.C. § 3105(d) (3)-(4); 12 C.F.R. 211.24(c)(2)-(3). The ministry has no objection to the establishment of the proposed branch and representative offices.

With respect to the financial and managerial resources of Bank, taking into consideration Bank's record of operations in its home country, its overall financial resources, and its standing with its home country supervisors, the Board has also determined that financial and managerial factors are consistent with approval of the proposed branch and representative offices. Bank appears to have the experience and capacity to support the proposed branch and representative offices and has established controls and procedures for the proposed offices to ensure compliance with U.S. law.

With respect to access to information about Bank's operations, the Board has reviewed the restrictions on disclosure in relevant jurisdictions in which Bank operates and has communicated with relevant government authorities regarding access to information. Bank and its parent have committed to make available to the Board such information on the operations of Bank and any of its affiliates that the Board deems necessary to determine and enforce compliance with the IBA, the Bank Holding Company Act of 1956, as amended, and other applicable federal law. To the extent that the provision of such information to the Board may be prohibited by law, Bank and its parent have

1. Unless otherwise indicated, data are as of June 30, 1999.

2. As of October 1, 1999, AV-Z owned 24.5 percent of Bank Austria. Although AV-Z is organized as a savings bank, Austrian law provides that AV-Z may only hold and manage assets.

3. *See* 12 C.F.R. 211.24(a)(3), and Board Letter dated September 21, 1998, to John C. Murphy, Jr., Esq.

4. In assessing this standard, the Board considers, among other factors, the extent to which the home country supervisors: (i) ensure that the bank has adequate procedures for monitoring and controlling its activities worldwide; (ii) obtain information on the condition of the bank and its subsidiaries and offices through regular examination reports, audit reports, or otherwise; (iii) obtain information on the dealings with and relationship between the bank and its affiliates, both foreign and domestic; (iv) receive from the bank financial reports that are consolidated on a worldwide basis or comparable information that permits analysis of the bank's financial condition on a worldwide consolidated basis; (v) evaluate prudential standards, such as capital adequacy and risk asset exposure, on a worldwide basis. These are indicia of comprehensive, consolidated supervision. No single factor is essential, and other elements may inform the Board's determination.

5. *See Creditanstalt-Bankverein*, 82 *Federal Reserve Bulletin* 594 (1996); *Erste Bank der Österreichischen Sparkassen Aktiengesellschaft*, 84 *Federal Reserve Bulletin* 1123 (1998).

committed to cooperate with the Board to obtain any necessary consents or waivers that might be required from third parties for disclosure of such information. In addition, subject to certain conditions, the Ministry may share information on Bank's operations with other supervisors, including the Board. In light of these commitments and other facts of record, and subject to the condition described below, the Board concludes that Bank has provided adequate assurances of access to any necessary information that the Board may request.

On the basis of all the facts of record, and subject to the commitments made by Bank and its parent, as well as the terms and conditions set forth in this order, the Board has determined that Bank's application to establish the federally-licensed branch and representative offices should be, and hereby is, approved. Should any restrictions on access to information on the operations or activities of Bank and its affiliates subsequently interfere with the Board's ability to obtain information to determine and enforce compliance by Bank or its affiliates with applicable federal statutes, the Board may require termination of any of Bank's direct or indirect activities in the United States, or in the case of an office licensed by the Office of the Comptroller of the Currency ("OCC"), recommend termination of such office. Approval of this application is also specifically conditioned on compliance by Bank and its parent with the commitments made in connection with this application and with the conditions in this order.[6] The commitments and conditions referred to above are conditions imposed in writing by the Board in connection with its decision and may be enforced in proceedings under 12 U.S.C. § 1818 or 12 U.S.C. § 1847 against Bank, its offices, and its affiliates.

By order of the Board of Governors, effective November 18, 1999.

Voting for this action: Chairman Greenspan, Vice Chairman Ferguson, and Governors Kelley and Meyer. Absent and not voting: Governor Gramlich.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

6. The Board's authority to approve establishment of the proposed branch office parallels the continuing authority of the OCC to license federal offices of a foreign bank; the Board's authority to approve establishment of the proposed representative offices parallels the continuing authority of the States of Georgia and California to license offices of a foreign bank. The Board's approval of this application does not supplant the authority of the OCC, or the States of Georgia and California, respectively, to license the proposed offices of Bank in accordance with any terms or conditions that they may impose.

UBS AG
Basel, Switzerland

Order Approving Establishment of a Representative Office

UBS AG ("Bank"), Basel, Switzerland, a foreign bank within the meaning of the International Banking Act ("IBA"), has applied under section 10(a) of the IBA (12 U.S.C. § 3107(a)) to establish a representative office in Washington, D.C. The Foreign Bank Supervision Enhancement Act of 1991, which amended the IBA, provides that a foreign bank must obtain the approval of the Board to establish a representative office in the United States.

Notice of the application, affording interested persons an opportunity to submit comments, has been published in a newspaper of general circulation in Washington, D.C. (*The Washington Times*, August 6, 1999). The time for filing comments has expired, and the Board has considered the application and all comments received.

Bank, with assets of approximately $581.7 billion,[1] was created as a result of the 1998 merger of Swiss Bank Corporation and Union Bank of Switzerland. UBS is the largest banking organization in Switzerland and the fourth largest banking organization in the world. Bank's shares are publicly traded and widely held, with no single shareholder owning more than 5 percent of the shares.

Bank engages in a broad range of commercial and investment banking activities, directly and through a number of subsidiaries, both foreign and domestic. In the United States, Bank operates state-licensed branches in Stamford, Connecticut, New York, New York, and Chicago, Illinois; federally-licensed branches in San Francisco and Los Angeles, California; state-licensed agencies in Miami, Florida, and Houston, Texas; and a representative office in Houston, Texas.

The proposed representative office would act as a liaison between Bank and existing and potential private banking customers in Washington, D.C., and adjacent areas in Virginia and Maryland. The office would market private banking products offered by Bank's New York branch.

In acting on an application to establish a representative office, the IBA and Regulation K provide that the Board shall take into account whether the foreign bank engages directly in the business of banking outside the United States and has furnished to the Board the information it needs to assess the application adequately. The Board also shall take into account whether the foreign bank is subject to comprehensive supervision or regulation on a consolidated basis by its home country supervisor (12 U.S.C. § 3107(a)(2); 12 C.F.R. 211.24(d)(2)).[2] In addition, the

1. Data are as of June 30, 1999.

2. In assessing this standard, the Board considers, among other factors, the extent to which the home country supervisors: (i) ensure that the bank has adequate procedures for monitoring and controlling its activities worldwide; (ii) obtain information on the condition of the bank and its subsidiaries and offices through regular examination reports, audit reports, or otherwise; (iii) obtain information on the

Board may take into account additional standards set forth in the IBA and Regulation K (12 U.S.C. § 3105(d)(3)-(4); 12 C.F.R. 211.24(c)(2)).

As noted above, Bank engages directly in the business of banking outside the United States. Bank also has provided the Board with information necessary to assess the application through submissions that address the relevant issues. With respect to supervision by home country authorities, the Board previously has determined that Bank was subject to comprehensive home country supervision on a consolidated basis.[3] There have been no material changes in the manner in which Swiss banks are supervised and regulated by their home country supervisors since that time. Accordingly, based on all the facts of record, the Board has determined that Bank continues to be subject to comprehensive supervision and regulation on a consolidated basis by its home country supervisor.

The Board also has taken into account the additional standards set forth in section 7 of the IBA and Regulation K (*see* 12 U.S.C. § 3105(d)(3)-(4); 12 C.F.R. 211.24(c)(2)). With respect to consent of appropriate home country authorities, the Swiss Banking Commission has no objection to establishment of the proposed representative office.

With respect to the financial and managerial resources of Bank, taking into consideration Bank's record of operation in its home country, its overall financial resources, and its standing with its home country supervisor, the Board also has determined that financial and managerial factors are consistent with approval of the proposed representative office. Bank appears to have the experience and capacity to support the proposed representative office and has established controls and procedures for the proposed representative office to ensure compliance with U.S. law.

With respect to access to information about Bank's operations, the Board has reviewed the restrictions on disclosure in relevant jurisdictions in which Bank operates and has communicated with relevant government authorities regarding access to information. Bank has committed to make available to the Board such information on the operations of Bank and any of its affiliates that the Board deems necessary to determine and enforce compliance with the IBA, the Bank Holding Company Act of 1956, as amended, and other applicable federal law. To the extent that the provision of such information may be prohibited by law, Bank has committed to cooperate with the Board to obtain any necessary consents or waivers that might be required from third parties for disclosure of such information. In addition, subject to certain conditions, the Swiss Banking Commission may share information on Bank's operations with other supervisors, including the Board. In light of these commitments and other facts of record, and subject to the conditions described below, the Board concludes that Bank has provided adequate assurances of access to any necessary information the Board may request.

On the basis of all the facts of record, and subject to the commitments made by Bank and the terms and conditions set forth in this order, the Board has determined that Bank's application to establish the representative office should be, and hereby is, approved. Should any restrictions on access to information on the operations or activities of Bank subsequently interfere with the Board's ability to obtain information to determine and enforce compliance by Bank or its affiliates with applicable federal statutes, the Board may require termination of any of Bank's or its affiliates' direct or indirect activities in the United States, or in the case of an office licensed by the Office of the Comptroller of the Currency, recommend termination of such office. Approval of this application also is specifically conditioned on compliance by Bank with the commitments made in connection with the application, and with the conditions in this order.[4] The commitments and conditions referred to above are conditions imposed in writing by the Board in connection with its decision, and may be enforced in proceedings under 12 U.S.C. § 1818 against Bank and its affiliates.

By order of the Board of Governors, effective November 24, 1999.

Voting for this action: Chairman Greenspan, Vice Chairman Ferguson, and Governors Kelley, Meyer, and Gramlich.

ROBERT DEV. FRIERSON
Associate Secretary of the Board

dealings with and relationship between the bank and its affiliates, both foreign and domestic; (iv) receive from the bank financial reports that are consolidated on a worldwide basis, or comparable information that permits analysis of the bank's financial condition on a worldwide consolidated basis; (v) evaluate prudential standards, such as capital adequacy and risk asset exposure, on a worldwide basis. These are indicia of comprehensive consolidated supervision. No single factor is essential and other elements may inform the Board's determination.

3. *See UBS AG, Federal Reserve Bulletin* 684 (1998).

4. The Board's authority to approve the establishment of the proposed representative office parallels the continuing authority of the District of Columbia to license or otherwise to permit the establishment of offices of a foreign bank. The Board's approval of this application does not supplant the authority of the District of Columbia and the Office of Banking and Financial Institutions ("Office") to license or otherwise to permit the establishment of the proposed office of Bank in accordance with any terms or conditions that the Office may impose.

INDEX OF ORDERS ISSUED OR ACTIONS TAKEN BY THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM (JULY 1, 1999 - SEPTEMBER 30, 1999)

Applicant	Merged or Acquired Bank or Activity	Date of Approval	*Bulletin* Volume and Page
South Bancorporation, Birmingham, Alabama	First American Corporation, Nashville, Tennessee First American National Bank, Nashville, Tennessee First American Federal Savings Bank, Nashville, Tennessee First American Community Development Corporation, Nashville, Tennessee	August 30, 1999	85, 685
Banco de la Ciudad de Buenos Aires, Buenos Aires, Argentina	To establish a representative office in New York, New York	May 5, 1999	85, 647
Bank Iowa, Red Oak, Iowa	U.S. Bank, N.A., Minneapolis, Minnesota	August 18, 1999	85, 693
Caixa Geral de Depositos S.A., Lisbon, Portugal	To establish a state-licensed branch in New York, New York	September 27, 1999	85, 774
Canadian Imperial Bank of Commerce, Toronto, Canada	The CIBC World Markets Corporation, Toronto, Canada CIBC World Markets Inc., Toronto, Canada CIBC Delaware Holdings Inc., New York, New York CIBC National Bank, Maitland, Florida	September 20, 1999	85, 733
Civitas Bank, St. Joseph, Michigan	First Indiana Bank, Indianapolis, Indiana	July 14, 1999	85, 645
The Dai-Ichi Kangyo Bank, Limited, Tokyo, Japan	CIT Group, Inc., Livingston, New Jersey Newcourt Credit Group, Inc., Toronto, Canada	September 27, 1999	85, 736
Firstar Corporation, Milwaukee, Wisconsin	Mercantile Bancorporation Inc., St. Louis, Missouri Ameribanc, Inc., St. Louis, Missouri Mercantile Bank National Association, St. Louis, Missouri	September 1, 1999	85, 737
Fleet Financial Group, Inc., Boston, Massachusetts	BankBoston Corporation, Boston, Massachusetts BankBoston, N.A., Boston, Massachusetts	September 7, 1999	85, 747
The Fuji Bank, Limited, Tokyo, Japan Heller Financial, Inc., Chicago, Illinois	HealthCare Financial Partners, Inc., Chevy Chase, Maryland	July 20 1999	85, 643
Manufacturers and Traders Trust Company, Buffalo, New York	The Chase Manhattan Bank, New York, New York	August 16, 1999	85, 694
Security Pecos Bancshares, Inc., Pecos, Texas Security Delaware Pecos Bancshares, Inc., Dover, Delaware	Security State Bank of Pecos, Pecos, Texas	July 28, 1999	85, 640

Index of Orders Issued or Actions Taken—Continued

Applicant	Merged or Acquired Bank or Activity	Date of Approval	*Bulletin* Volume and Page
Stockman Financial Corporation, Miles City, Montana	Terry Bancshares, Inc., Terry, Montana State Bank of Terry, Terry, Montana	July 2, 1999	85, 641
The Sumitomo Bank, Limited, Osaka, Japan	Daiwa SB Investments Ltd., New York, New York	July 20, 1999	85, 644
Texas Regional Bancshares, Inc., McAllen, Texas Texas State Bank, McAllen, Texas	Harlingen Bancshares, Inc., Harlingen, Texas HN Bancshares of Delaware, Inc., Harlingen, Texas Harlingen National Bank, Harlingen, Texas	August 23, 1999	85, 683
United Bank of Philadelphia, Philadelphia, Pennsylvania	First Union National Bank, Charlotte, North Carolina	September 7, 1999	85, 773

APPLICATIONS APPROVED UNDER BANK HOLDING COMPANY ACT
By the Secretary of the Board

Recent applications have been approved by the Secretary of the Board as listed below. Copies are available upon request to the Freedom of Information Office, Office of the Secretary, Board of Governors of the

Section 3

Applicant(s)	Bank(s)	Effective Date
Compass Bancshares, Inc., Birmingham, Alabama	Western Bancshares of Albuquerque, Inc., Albuquerque, New Mexico	November 5, 1999

APPLICATIONS APPROVED UNDER BANK HOLDING COMPANY ACT
By Federal Reserve Banks

Recent applications have been approved by the Federal Reserve Banks as listed below. Copies are available upon request to the Reserve Banks.

Section 3

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Area Bancshares, Corporation, Owensboro, Kentucky	Lyon Bancorp, Inc., Eddyville, Kentucky Peoples Bank of Murray, Kentucky, Murray, Kentucky Dees Bank of Hazel, Hazel, Kentucky Bank of Livingston County, Tiline, Kentucky	St. Louis	November 4, 1999

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Arvest Bank Group, Inc., Bentonville, Arkansas	The First National Bank of Huntsville, Huntsville, Arkansas	St. Louis	October 29, 1999
Bank of America Corporation, Charlotte, North Carolina NB Holdings Corporation, Charlotte, North Carolina	Bank of America, N.A., Charlotte, North Carolina Lake-Osceola State Bank, Baldwin, Michigan	Richmond	November 24, 1999
Camden National Corporation, Camden, Maine	KSB Bancorp, Inc., Kingfield, Maine Kingfield Savings Bank, Kingfield, Maine	Boston	November 10, 1999
Capitol Bancorp Ltd., Lansing, Michigan Sun Community Bancorp Limited, Phoenix, Arizona	Nevada Community Bancorp Limited, Las Vegas, Nevada	Chicago	November 10, 1999
Charter Banking Corp., Tampa, Florida	Columbia Bank, Tampa, Florida	Atlanta	October 25, 1999
Community First Bankshares, Inc., Fargo, North Dakota Community First National Bank, Fergus Falls, Minnesota	River Acquisition Corp., Minneapolis, Minnesota River Bancorp., Inc., Ramsey, Minnesota Northland Security Bank, Ramsey, Minnesota	Minneapolis	November 10, 1999
The Employee Stock and Ownership Trust of First Grayson Bancshares, Inc., Celeste, Texas	First Grayson Bancshares, Inc. Waco, Texas	Dallas	November 10, 1999
Farmers and Merchants Bancshares, Inc., Burlington, Iowa	Farmers and Merchants Bank and Trust, Mount Pleasant, Iowa	Chicago	November 1, 1999
Farmers & Merchants Investment, Inc., Milford, Nebraska	North Central Bancorp, Inc., Norfolk, Nebraska	Kansas City	November 24, 1999
First Bancshares Corporation, Gladstone, Michigan	Baybank Corporation, Gladstone, Michigan	Minneapolis	November 10, 1999
First Delta Bankshares, Inc., Blytheville, Arkansas	Merchants and Planters Bank, Manila, Arkansas	St. Louis	November 18, 1999
First Manitowoc Bancorp, Inc. Manitowoc, Wisconsin	Dairy State Financial Services, Inc., Plymouth, Wisconsin Dairy State Bank, Plymouth, Wisconsin	Chicago	November 3, 1999
First Minden Bancshares, Inc., Minden, Nebraska	First National Bank and Trust Company of Minden, Minden, Nebraska	Kansas City	November 10, 1999
First State Financial Corporation, Sarasota, Florida	First State Bank of Pinellas, St. Petersburg, Florida	Atlanta	November 10, 1999
F.N.B. Corporation, Hermitage, Pennsylvania	Sun Bancorp, Inc., Selinsgrove, Pennsylvania	Cleveland	November 1, 1999
Gideon Enterprises, L.P., Topeka, Kansas	Silver Lake Bank, Topeka, Kansas	Kansas City	November 9, 1999

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Gold Banc Corporation, Leawood, Kansas Gold Banc Acquisition Corporation VIII, Inc., Leawood, Kansas	Union Bankshares, Ltd., Denver, Colorado Union Bank and Trust, Denver, Colorado	Kansas City	November 4, 1999
Great River Banshares Corporation, Burlington, Iowa	Henry County Bank, Mount Pleasant, Iowa	Chicago	November 15, 1999
Greenville First Bancshares, Inc., Greenville, South Carolina	Greenville First Bank, N.A., Greenville, South Carolina	Richmond	November 2, 1999
Heritage Commerce Corp., San Jose, California	Heritage Bank South Bay, Morgan Hill, California	San Francisco	November 12, 1999
Interbancorp, Duvall, Washington	Inter Bank, Duvall, Washington	San Francisco	October 28, 1999
Interim First Capital Corporation, Norcross, Georgia	First Capital Bancorp, Inc., Norcross, Georgia First Capital Bank, Norcross, Georgia	Atlanta	October 25, 1999
Intermountain First Bancorp, Las Vegas, Nevada	Nevada First Bank, Las Vegas, Nevada	San Francisco	October 21, 1999
JD Financial Group, Inc., Evanston, Illinois	Pan American Bank, Chicago, Illinois	Chicago	November 2, 1999
Lake Michigan Financial Corporation, Holland, Michigan	The Bank of Northern Michigan, Petoskey, Michigan	Chicago	November 15, 1999
Merchants & Manufacturers Bancorp, New Berlin, Wisconsin Merchants Merger Corp., New Berlin, Wisconsin	Pyramid Bancorp., Grafton, Wisconsin Grafton State Bank, Grafton, Wisconsin	Chicago	November 23, 1999
Miles Independent Bancorporation, Inc., Advance, Missouri Miles Bancshares, Inc., Advance, Missouri	The Bank of Advance, Advance, Missouri The First National Bank of Lerna, Lerna, Illinois Bowen State Bank, Bowen, Illinois	St. Louis	October 22, 1999
NBT Bancorp Inc., Norwich, New York	Lake Ariel Bancorp, Inc, Lake Ariel, Pennsylvania LA Bank, N.A., Lake Ariel, Pennsylvania	New York	November 19, 1999
North American Bancshares, Inc., Sherman, Texas	Marble Falls National Bancshares, Inc., Marble Falls, Texas	Dallas	November 18, 1999
Northern Plains Investment, Inc., Jamestown, North Dakota	North Star Holding Company, Inc., Jamestown, North Dakota	Minneapolis	November 4, 1999
NorthStar Bancshares, Inc., Estherville, Iowa	NorthStar Bank, Esterville, Iowa	Chicago	November 10, 1999
Pacific Crest Capital, Inc., Agoura Hills, California	Pacific Crest Bank, Agoura Hills, California	San Francisco	November 17, 1999
Paradigm Bancorporation, Inc., Houston, Texas	Dayton State Bank, Dayton, Texas		November 10, 1999
Regal Bancorp, Inc., Owings Mills, Maryland	Regal Bank & Trust, Owings Mills, Maryland Regal Savings Bank, FSB, Owings Mills, Maryland	Richmond	November 8, 1999

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Regions Financial Corporation, Birmingham, Alabama	LCB Corporation, Fayetteville, Tennessee Lincoln County Bank, Fayetteville, Tennessee	Atlanta	November 3, 1999
Regions Financial Corporation, Birmingham, Alabama	Minden Bancshares, Inc., Minden, Louisiana Minden Bank & Trust Company, Minden, Louisiana	Atlanta	November 3, 1999
SNB Holdings, Inc., Slocomb, Alabama	Slocomb National Bank, Slocomb, Alabama	Atlanta	October 25, 1999
State Bank of Cokato Employee Stock Ownership Plan and Trust, Cokato, Minnesota State Bank of Cokato Employee Stock Ownership Plan and Trust II, Cokato, Minnesota	Cokato Bancshares, Inc., Cokato, Minnesota State Bank of Cokato, Cokato, Minnesota	Minneapolis	November 15, 1999
St. Elizabeth Bancshares, Inc., St. Elizabeth, Missouri	Bank of St. Elizabeth, St. Elizabeth, Missouri	St. Louis	November 10, 1999
Team Financial Acquisition Subsidiary, Inc., Paola, Kansas Team Financial, Inc., Paola, Kansas	Team Financial Employees Stock Ownership Plan, Paola, Kansas ComBankshares, Inc., Prairie Village, Kansas Community Bank of Chapman, Chapman, Kansas	Kansas City	November 17, 1999
Texas Independent Bancshares, Inc., Texas City, Texas	American Independent Bancshares, Inc., Santa Fe, Texas	Dallas	November 18, 1999
Tompkins Trustco, Inc., Ithaca, New York	Letchworth Independent Bancshares Corporation, Castile, New York The Bank of Castile, Castile, New York The Mahopac National Bank, Mahopac, New York	New York	November 10, 1999
Uwharrie Capital Corp, Albemarle, North Carolina	Anson Bancorp, Inc., Wadesboro, North Carolina	Richmond	October 28, 1999
VIB Corp, El Centro, California	Kings River Bancorp, Reedley, California Kings River State Bank, Reedley, California	San Francisco	November 10, 1999
Westborough Bancorp, M.H.C., Westborough, Massachusetts Westborough Financial Services, Inc., Westborough, Massachusetts	Westborough Savings Bank, Westborough, Massachusetts	Boston	November 17, 1999
Wilson & Muir Bancorp, Inc., Bardstown, Kentucky	Farmers Bank of Vice Grove, Vine Grove, Kentucky	St. Louis	November 22, 1999

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
ANB Bankcorp, Inc., Bristow, Oklahoma	To engage in data processing activities	Kansas City	October 27, 1999
Banco Santander Central Hispano, S.A., Madrid, Spain	To engage *de novo* in certain leasing activities	New York	October 28, 1999
Bay Banks of Virginia, Inc., Kilmarnock, Virginia	Bay Trust Company, Kilmarnock, Virginia	Richmond	November 8, 1999
BostonFed Bancorp, Inc., Burlington, Massachusetts	Diversified Ventures, Inc., d/b/a Forward Financial Company, Northborough, Massachusetts	Boston	November 5, 1999
Cera Stichting VZW, Leuven, Belgium Cera Beheersmaatschappij NV, Leuven, Belgium	Cera Holding, C.V., Leuven, Belgium Cera Ancora NV, Leuven, Belgium Almanij, N.V., Antwerp, Belgium, KBC Bank & Insurance Holding Company, N.V., Brussels, Belgium KBC Bank, N.V., Brussels, Belgium D.E. Shaw & Co., L.P., New York, New York	New York	October 29, 1999
Commerce Bancorp, Inc., Cherry Hill, New Jersey	Chester Valley Bancorp, Cherry Hill, New Jersey	Philadelphia	October 28, 1999
Dai-Ichi Kangyo Bank, Limited, Tokyo, Japan	Heller Financial Inc., Chicago, Illinois CIT Group, Inc., New York, New York	San Francisco	November 5, 1999
Eagle Bancshares, Inc., Fairfield, Texas Fairfield Holdings, Fairfield, Texas	Texas Bank, S.S.B., Buffalo, Texas	Dallas	October 25, 1999
First National Banc, Inc., St. Marys, Georgia	First National Insurance Agency, Inc., Woodbine, Georgia	Atlanta	October 21, 1999
GBT Bancorp, Gloucester, Massachusetts	Gloucester Investment Corporation, Gloucester, Massachusetts	Boston	November 12, 1999
Hartford Financial Corporation, Hartford, Alabama	City Insurance and Financial Services, Inc., Hartford, Alabama	Atlanta	November 3, 1999
Hometown Bancorp, Ltd., Fond du Lac, Wisconsin	Hometown Mortgage Services, Inc., Fond du Lac, Wisconsin	Chicago	November 17, 1999
Iowa State Bank Holding Company, Des Moines, Iowa	Capitol Partners, L.C., Des Moines, Iowa	Chicago	November 15, 1999
Larch Bancorporation, Inc., Larchwood, Iowa	To engage *de novo* in extending credit and servicing loans	Chicago	November 3, 1999
M & F Bancorp, Inc., Holly Springs, Mississippi	Fidelity National Loans, Inc., Holly Springs, Mississippi	St. Louis	November 10, 1999
McCook National Company, McCook, Nebraska	Maplewood Apartments, L.L.C., McCook, Nebraska	Kansas City	November 10, 1999
PAB Bankshares, Inc., Valdosta, Georgia	Baxley Federal Savings Bank, Baxley, Georgia	Atlanta	November 5, 1999
PNC Bank Corp., Pittsburgh, Pennsylvania	First Data Investor Services Group, Inc., Westborough, Massachusetts	Cleveland	November 8, 1999

Section 4—Continued

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Provident Financial Group, Inc., Cincinnati, Ohio	Fidelity Financial of Ohio, Inc., Cincinnati, Ohio Centennial Bank, Cincinnati, Ohio	Cleveland	November 17, 1999
Provident Financial Group, Inc., Cincinnati, Ohio	OHSL Financial Corporation, Cincinnati, Ohio	Cleveland	October 25, 1999

Sections 3 and 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Graff Family, Inc., McCook, Nebraska	McCook National Company, McCook, Nebraska The McCook National Bank, McCook, Nebraska Maplewood Apartments, L.L.C., McCook, Nebraska	Kansas City	November 10, 1999
North Central Bancorp, Inc., Norfolk, Nebraska	Bank of Norfolk, Norfolk, Nebraska Columbus Financial Corporation, Columbus, Nebraska Columbus Federal Savings Bank, Columbus, Nebraska	Kansas City	October 27, 1999
The Royal Bank of Scotland Group plc, Edinburgh, Scotland The Royal Bank of Scotland plc, Edinburgh, Scotland	RBSG International Holdings Limited, Edinburgh, Scotland Citizens Financial Group, Inc., Providence, Rhode Island UST Corp., Boston, Massachusetts	Boston	November 19, 1999
South Central Bancshares of Kentucky, Inc., Horse Cave, Kentucky	First Deposit Bancshares, Inc., Tompkinsville, Kentucky Deposit Bank of Monroe County, Tompkinsville, Kentucky South Central Savings Bank, FSB, Edmonton, Kentucky	St. Louis	October 22, 1999

APPLICATIONS APPROVED UNDER BANK MERGER ACT
By the Secretary of the Board

Recent applications have been approved by the Secretary of the Board as listed below. Copies are available upon request to the Freedom of Information Office, Office of the Secretary, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Applicant(s)	Bank(s)	Effective Date
AmSouth Bank, Birmingham, Alabama	First American National Bank, Nashville, Tennessee	November 2, 1999
Compass Bank, Birmingham, Alabama	Western Bank, Albuquerque, New Mexico	November 5, 1999

By Federal Reserve Banks

Recent applications have been approved by the Federal Reserve Banks as listed below. Copies are available upon request to the Reserve Banks.

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
The Bank of Orange County, Fountain Valley, California	Security First Bank, Fullerton, California	San Francisco	October 27, 1999
CalWest Bank, Downey, California	National Business Bank, Torrance, California	San Francisco	October 27, 1999
Peapack-Gladstone Bank, Gladstone, New Jersey	Chatham Savings, FSB, Gladstone, New Jersey	New York	November 12, 1999
SunTrust Bank, Atlanta, Atlanta, Georgia	STI Capital Management, N.A., Orlando, Florida	Atlanta	November 24, 1999
UnionBank/West, Macomb, Illinois	Associated Bank Illinois, NA, Rockford, Illinois	Chicago	November 5, 1999
Valencia Bank & Trust, Santa Clarita, California	First Valley National Bank, Lancaster, California	San Francisco	November 16, 1999
	Valley National Bank, Lancaster, California	San Francisco	November 16, 1999

Pending Cases Involving the Board of Governors

This list of pending cases does not include suits against the Federal Reserve Banks in which the Board of Governors is not named a party.

Wasserman v. Federal Reserve Bank, No. 99–6280 (2d Cir., filed August 26, 1999). Appeal of district court dismissal of case challenging refusal by the Board and the Federal Reserve Bank of New York to investigate certain matters.

Artis v. Greenspan, No. 1:99CV02073 (EGS) (D.D.C., filed August 3, 1999). Employment discrimination action.

Sheriff Gerry Ali v. U.S. State Department, No. 99–7438 (C.D. Cal., filed July 21, 1999). Action relating to impounded bank drafts.

Sedgwick v. Board of Governors, No. Civ 99 0702 (D. Arizona, filed April 14, 1999). Action under Federal Tort Claims Act alleging violation of bank supervision requirements. The Board filed a motion to dismiss on June 15, 1999.

Hunter v. Board of Governors, No. 1:98CV02994 (TFH) (D.D.C., filed December 9, 1998). Action under the Freedom of Information Act and the Privacy Act. The Board filed a motion to dismiss or for summary judgment on July 22, 1999.

Folstad v. Board of Governors, No. 1:99 CV 124 (W.D. Mich., filed February 17, 1999). Freedom of Information Act complaint. On November 16, 1999, the district court granted the Board's motion for summary judgment and dismissed the action.

Nelson v. Greenspan, No. 1:99CV00215 (EGS) (D.D.C., filed January 28, 1999). Employment discrimination complaint. On March 29, 1999, the Board filed a motion to dismiss the action.

Fraternal Order of Police v. Board of Governors, No. 1:98CV03116 (WBB)(D.D.C., filed December 22, 1998). Declaratory judgment action challenging Board labor practices. On February 26, 1999, the Board filed a motion to dismiss the action.

Independent Community Bankers of America v. Board of Governors, No. 98- 1482 (D.C. Cir., filed October 21, 1998). Petition for review of a Board order dated September 23, 1998, conditionally approving the applications of Travelers Group, Inc., New York, New York, to become a bank holding company by acquiring Citicorp, New York, New York, and its bank and nonbank subsidiaries. On November 2, 1999, the court affirmed the Board's order.

Board of Governors v. Carrasco, No. 98 Civ. 3474 (LAK) (S.D.N.Y., filed May 15, 1998). Action to freeze assets of individual pending administrative adjudication of civil money penalty assessment by the Board. On May 26, 1998, the court issued a preliminary injunction restraining the transfer or disposition of the individual's assets and appointing the Federal Reserve Bank of New York as receiver for those assets.

Board of Governors v. Pharaon, No. 98–6101 (2d Cir., filed May 4, 1998). Appeal and cross-appeal of district court order granting in part and denying in part the Board's motion for summary judgment seeking prejudgment interest and a statutory surcharge in connection with a civil money penalty assessed by the Board. On February 24, 1999, the court granted the Board's appeal and denied the cross-appeal, and remanded the matter to the district court for determination of prejudgment interest due to the Board.

Fenili v. Davidson, No. C-98–01568-CW (N.D. California, filed April 17, 1998). Tort and constitutional claim arising out of return of a check. On June 5, 1998, the Board filed its motion to dismiss.

Goldman v. Department of the Treasury, No. 98–9451 (11th Circuit, filed November 10, 1998). Appeal from a District Court order dismissing an action challenging Federal Reserve notes as lawful money.

Kerr v. Department of the Treasury, No. CV-S-97–01877-DWH (D. Nev., filed December 22, 1997). Challenge to income taxation and Federal Reserve notes. On September 3, 1998, a motion to dismiss was filed on behalf of all federal defendants. The court dismissed the action on March 31, 1999, and on April 28, 1999, the plaintiff filed a notice of appeal.

Bettersworth v. Board of Governors, No. 97-CA-624 (W.D. Tex., filed August 21, 1997). Privacy Act case. On June 1, 1999, the Board filed a motion for summary judgment.

Final Enforcement Orders Issued by the Board of Governors

Robert and Adele Barber
Cooper City, Florida

The Federal Reserve Board announced on November 16, 1999, the issuance of a consent Order against Robert and Adele Barber, both institution- affiliated parties of the First Western Bank, Cooper City, Florida, a state member bank.

Matthew J. Callahan
Cooper City, Florida

The Federal Reserve Board announced on November 16, 1999, the issuance of a consent Order against Matthew J. Callahan, an institution- affiliated party of the First Western Bank, Cooper City, Florida, a state member bank.

Bertram Smith
Cooper City, Florida

The Federal Reserve Board announced on November 16, 1999, the issuance of a consent Order against Bertram Smith, an institution-affiliated party of the First Western Bank, Cooper City, Florida, a state member bank.

Termination of Enforcement Actions

The Federal Reserve Board announced on November 16, 1999, the termination of the following enforcement actions:

Mercantile Capital Corp.
Boston, Massachusetts

Written agreement dated January 26, 1996; terminated August 23, 1999.

Adairsville Bancshares, Inc., and Bank of Adairsville
Adairsville, Georgia

Written agreement dated December 10, 1998; terminated September 8, 1999.

PanAmerican Bank
Coconut Grove, Florida

Cease and Desist Order dated march 4, 1998; terminated September 29, 1999.

California Center Bank
Los Angeles, California

Cease and Desist Order dated October 4, 1994; terminated October 15, 1999.

Written Agreements Approved by Federal Reserve Banks

Heritage Bancorp Company, Inc.
Cleveland, Oklahoma

The Federal Reserve Board announced on November 16, 1999, the execution of a Written Agreement by and among Heritage Bancorp Company, Inc., Cleveland, Oklahoma; the First Bank of Cleveland, Cleveland, Oklahoma; the Federal Reserve Bank of Kansas City; and the Oklahoma State Banking Department.

Financial and Business Statistics

INTERNATIONAL STATISTICS

Summary Statistics

Reported by Banks in the United States

Reported by Nonbanking Business Enterprises in the United States

Securities Holdings and Transactions

Interest and Exchange Rates

SPECIAL TABLES

Guide to Tabular Presentation

SYMBOLS AND ABBREVIATIONS

c	Corrected
e	Estimated
n.a.	Not available
p	Preliminary
r	Revised (Notation appears on column heading when about half of the figures in that column are changed.)
*	Amounts insignificant in terms of the last decimal place shown in the table (for example, less than 500,000 when the smallest unit given is millions)
0	Calculated to be zero
. . .	Cell not applicable
ATS	Automatic transfer service
BIF	Bank insurance fund
CD	Certificate of deposit
CMO	Collateralized mortgage obligation
CRA	Community Reinvestment Act of 1977
FFB	Federal Financing Bank
FHA	Federal Housing Administration
FHLBB	Federal Home Loan Bank Board
FHLMC	Federal Home Loan Mortgage Corporation
FmHA	Farmers Home Administration
FNMA	Federal National Mortgage Association
FSLIC	Federal Savings and Loan Insurance Corporation
G-7	Group of Seven
G-10	Group of Ten
GNMA	Government National Mortgage Association
GDP	Gross domestic product
HUD	Department of Housing and Urban Development
IMF	International Monetary Fund
IO	Interest only
IPCs	Individuals, partnerships, and corporations
IRA	Individual retirement account
MMDA	Money market deposit account
MSA	Metropolitan statistical area
NOW	Negotiable order of withdrawal
OCD	Other checkable deposit
OPEC	Organization of Petroleum Exporting Countries
OTS	Office of Thrift Supervision
PMI	Private mortgage insurance
PO	Principal only
REIT	Real estate investment trust
REMIC	Real estate mortgage investment conduit
RHS	Rural Housing Service
RP	Repurchase agreement
RTC	Resolution Trust Corporation
SCO	Securitized credit obligation
SDR	Special drawing right
SIC	Standard Industrial Classification
VA	Department of Veterans Affairs

GENERAL INFORMATION

In many of the tables, components do not sum to totals because of rounding.

Minus signs are used to indicate (1) a decrease, (2) a negative figure, or (3) an outflow.

"U.S. government securities" may include guaranteed issues of U.S. government agencies (the flow of funds figures also include not fully guaranteed issues) as well as direct obligations of the Treasury.

"State and local government" also includes municipalities, special districts, and other political subdivisions.

1.10 RESERVES, MONEY STOCK, AND DEBT MEASURES

Percent annual rate of change, seasonally adjusted[1]

Monetary or credit aggregate	1998	1999			1999				
	Q4	Q1	Q2	Q3[r]	June	July[r]	Aug.[r]	Sept.[r]	Oct.
Reserves of depository institutions[2]									
1 Total	−1.8	−1.2	−6.6	−15.4	−40.4	−24.9	2.5	1.3	−33.3
2 Required	−2.5	1.0	−5.6	−15.0	−41.7	−20.3	1.1	−.6	−33.0
3 Nonborrowed	−.6	−1.3	−6.7	−17.1	−41.0	−29.6	1.6	1.5	−31.9
4 Monetary base[3]	8.7	9.1	10.1	8.5	6.2	8.0	7.1	11.3	16.5
Concepts of money and debt[4]									
5 M1	5.0	2.8	3.5	−2.3	−4.0	−1.7	3.2	−9.8	5.5
6 M2	11.0	7.2	5.7[r]	5.2	4.3[r]	5.5	5.7	4.9	5.0
7 M3	12.9	7.6	5.8[r]	5.7	6.4[r]	5.1	5.2	6.7	10.3
8 Debt	6.3	6.6[r]	6.8	5.7	5.4	5.3	6.2	6.5	n.a.
Nontransaction components									
9 In M2[5]	13.0	8.7	6.4	7.6	7.1[r]	7.9	6.4	9.5	4.8
10 In M3 only[6]	18.4	8.6	5.9	7.1	11.9	4.1	4.0	11.5	24.9
Time and savings deposits									
Commercial banks									
11 Savings, including MMDAs	17.6	11.6	9.7	11.7	12.1	14.0	8.0	14.4	4.2
12 Small time[7]	.3	−5.5	−3.3	1.3	−2.0	1.2	3.3	7.4	6.6
13 Large time[8,9]	3.8	−.3	−3.2	7.2	−7.4	21.3	−5.1	28.6	62.4
Thrift institutions									
14 Savings, including MMDAs	10.1	12.8	14.6	15.0	18.5	19.0	4.2	4.5	−3.9
15 Small time[7]	−6.7	−6.5	−7.9	−5.1	−14.4	−4.6	1.2	3.5	4.6
16 Large time[8]	10.4	7.6	−7.0	4.1	−1.4	10.9	5.4	10.8	−8.0
Money market mutual funds									
17 Retail	28.5	20.5	10.7[r]	6.9	8.7[r]	1.9	9.9	8.7	9.6
18 Institution-only	41.8	17.9	14.5	7.5	7.7	−4.6	22.9	6.3	25.1
Repurchase agreements and Eurodollars									
19 Repurchase agreements[10]	18.9	14.1	−2.7	15.3	53.2	−.4	6.2	−1.9	−12.0
20 Eurodollars[10]	3.2	−.8	32.0	−7.2	22.5	−17.8	−32.6	−.7	−14.9
Debt components[4]									
21 Federal	−2.8	−3.1	−2.3	−.3	.3	1.4	1.0	−4.2	n.a.
22 Nonfederal	9.2	9.5[r]	9.5	7.4	6.9[r]	6.4	7.6	9.5	n.a.

1. Unless otherwise noted, rates of change are calculated from average amounts outstanding during preceding month or quarter.

2. Figures incorporate adjustments for discontinuities, or "breaks," associated with regulatory changes in reserve requirements. (See also table 1.20.)

3. The seasonally adjusted, break-adjusted monetary base consists of (1) seasonally adjusted, break-adjusted total reserves (line 1), plus (2) the seasonally adjusted currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all weekly reporters whose vault cash exceeds their required reserves) the seasonally adjusted, break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

4. Composition of the money stock measures and debt is as follows:

M1: (1) currency outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions, (2) travelers checks of nonbank issuers, (3) demand deposits at all commercial banks other than those owed to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float, and (4) other checkable deposits (OCDs), consisting of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at depository institutions, credit union share draft accounts, and demand deposits at thrift institutions. Seasonally adjusted M1 is computed by summing currency, travelers checks, demand deposits, and OCDs, each seasonally adjusted separately.

M2: M1 plus (1) savings (including MMDAs), (2) small-denomination time deposits (time deposits—including retail RPs—in amounts of less than $100,000), and (3) balances in retail money market mutual funds. Excludes individual retirement accounts (IRAs) and Keogh balances at depository institutions and money market funds. Seasonally adjusted M2 is calculated by summing savings deposits, small-denomination time deposits, and retail money fund balances, each seasonally adjusted separately, and adding this result to seasonally adjusted M1.

M3: M2 plus (1) large-denomination time deposits (in amounts of $100,000 or more), (2) balances in institutional money funds, (3) RP liabilities (overnight and term) issued by all depository institutions, and (4) Eurodollars (overnight and term) held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Seasonally adjusted M3 is calculated by summing large time deposits, institutional money fund balances, RP liabilities, and Eurodollars, each seasonally adjusted separately, and adding this result to seasonally adjusted M2.

Debt: The debt aggregate is the outstanding credit market debt of the domestic nonfinancial sectors—the federal sector (U.S. government, not including government-sponsored enterprises or federally related mortgage pools) and the nonfederal sectors (state and local governments, households and nonprofit organizations, nonfinancial corporate and nonfarm noncorporate businesses, and farms). Nonfederal debt consists of mortgages, tax-exempt and corporate bonds, consumer credit, bank loans, commercial paper, and other loans. The data, which are derived from the Federal Reserve Board's flow of funds accounts, are break-adjusted (that is, discontinuities in the data have been smoothed into the series) and month-averaged (that is, the data have been derived by averaging adjacent month-end levels).

5. Sum of (1) savings deposits (including MMDAs), (2) small time deposits, and (3) retail money fund balances, each seasonally adjusted separately.

6. Sum of (1) large time deposits, (2) institutional money fund balances, (3) RP liabilities (overnight and term) issued by depository institutions, and (4) Eurodollars (overnight and term) of U.S. addressees, each seasonally adjusted separately.

7. Small time deposits—including retail RPs—are those issued in amounts of less than $100,000. All IRA and Keogh account balances at commercial banks and thrift institutions are subtracted from small time deposits.

8. Large time deposits are those issued in amounts of $100,000 or more, excluding those booked at international banking facilities.

9. Large time deposits at commercial banks less those held by money market funds, depository institutions, the U.S. government, and foreign banks and official institutions.

10. Includes both overnight and term.

1.11 RESERVES OF DEPOSITORY INSTITUTIONS AND RESERVE BANK CREDIT[1]

Millions of dollars

Factor	Average of daily figures			Average of daily figures for week ending on date indicated						
	1999			1999						
	Aug.	Sept.	Oct.	Sept. 15	Sept. 22	Sept. 29	Oct. 6	Oct. 13	Oct. 20	Oct. 27
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	528,020	536,558	542,985	534,616	538,420	537,386	539,721	541,218	544,464	543,573
U.S. government securities[2]										
2 Bought outright—System account[3]	487,746	490,477	490,849	490,649	491,006	489,966	490,373	491,044	490,907	490,711
3 Held under repurchase agreements	1,296	2,373	428	1,268	1,938	2,871	2,981	0	0	0
Federal agency obligations										
4 Bought outright	247	238	206	238	238	238	229	219	198	194
5 Held under repurchase agreements	4,751	9,515	1,916	8,224	11,155	9,728	10,548	0	0	0
6 Repurchase agreements—triparty[4]	n.a.	n.a.	14,248	n.a.	n.a.	n.a.	573	14,659	18,123	17,061
7 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
8 Adjustment credit	84	57	35	23	72	101	82	26	15	40
9 Seasonal credit	273	283	224	268	283	304	283	263	224	191
10 Special Liquidity Facility credit	0	0	3	0	0	0	1	0	1	7
11 Extended credit	0	0	0	0	0	0	0	0	0	0
12 Float	430	288	482	948	153	199	527	781	553	324
13 Other Federal Reserve assets	33,193	33,328	34,594	32,998	33,575	33,979	34,124	34,225	34,444	35,047
14 Gold stock	11,047	11,046	11,050	11,046	11,046	11,048	11,050	11,051	11,050	11,050
15 Special drawing rights certificate account	8,200	7,667	7,200	8,057	7,200	7,200	7,200	7,200	7,200	7,200
16 Treasury currency outstanding	27,231	27,381	27,483	27,367	27,397	27,427	27,457	27,471	27,485	27,499
ABSORBING RESERVE FUNDS										
17 Currency in circulation	536,083	542,365	550,878	542,626	542,578	542,567	545,124	549,897	551,630	553,185
18 Reverse repurchase agreements—triparty[4]	n.a.	n.a.	0	n.a.	n.a.	n.a.	0	0	0	0
19 Treasury cash holdings	69	89	94	87	86	93	93	97	94	92
Deposits, other than reserve balances, with Federal Reserve Banks										
20 Treasury	5,076	6,389	5,179	5,480	7,512	7,403	5,457	5,235	5,421	5,206
21 Foreign	196	226	182	229	265	218	167	202	187	180
22 Service-related balances and adjustments	7,020	7,100	7,165	7,119	6,924	7,323	7,392	7,080	7,097	7,062
23 Other	274	248	278	269	248	223	271	319	291	260
24 Other Federal Reserve liabilities and capital	18,110	18,524	18,362	18,245	18,601	18,606	18,801	18,195	18,332	18,242
25 Reserve balances with Federal Reserve Banks[5]	7,669	7,712	6,580	7,031	7,849	6,627	8,123	5,916	7,146	5,095

Factor	End-of-month figures			Wednesday figures						
	Aug.	Sept.	Oct.	Sept. 15	Sept. 22	Sept. 29	Oct. 6	Oct. 13	Oct. 20	Oct. 27
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	534,796	546,150	548,919	540,481	544,833	543,003	540,266	544,224	550,310	548,132
U.S. government securities[2]										
2 Bought outright—System account[3]	490,198	489,037	490,738	491,129	491,054	491,019	491,266	491,282	491,367	492,051
3 Held under repurchase agreements	2,575	7,607	0	1,335	4,893	5,220	2,160	0	0	0
Federal agency obligations										
4 Bought outright	238	238	188	238	238	238	228	198	198	188
5 Held under repurchase agreements	9,195	14,456	0	13,040	14,877	11,183	7,110	0	0	0
6 Repurchase agreements—triparty[4]	n.a.	n.a.	22,560	n.a.	n.a.	n.a.	4,011	15,520	23,550	20,065
7 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
8 Adjustment credit	53	179	41	28	132	105	142	16	14	27
9 Seasonal credit	285	300	123	278	287	313	272	245	209	174
10 Special Liquidity Facility credit	0	0	10	0	0	0	5	0	6	10
11 Extended credit	0	0	0	0	0	0	0	0	0	0
12 Float	−291	65	−297	1,241	−504	583	869	2,543	353	277
13 Other Federal Reserve assets	32,544	34,268	35,556	33,192	33,857	34,342	34,203	34,420	34,614	35,340
14 Gold stock	11,045	11,047	11,049	11,046	11,048	11,048	11,050	11,051	11,050	11,050
15 Special drawing rights certificate account	8,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200
16 Treasury currency outstanding	27,298	27,457	27,513	27,367	27,397	27,427	27,457	27,471	27,485	27,499
ABSORBING RESERVE FUNDS										
17 Currency in circulation	538,466	544,101	555,597	543,515	543,220	544,246	547,759	551,615	553,003	555,537
18 Reverse repurchase agreements—triparty[4]	n.a.	n.a.	0	n.a.	n.a.	n.a.	0	0	0	0
19 Treasury cash holdings	84	93	94	85	93	93	97	95	92	94
Deposits, other than reserve balances, with Federal Reserve Banks										
20 Treasury	5,559	6,641	4,527	10,128	7,721	8,232	5,259	4,948	4,925	4,363
21 Foreign	166	243	189	242	161	191	178	284	167	172
22 Service-related balances and adjustments	6,919	7,392	7,276	7,119	6,924	7,324	7,392	7,080	7,097[r]	7,062
23 Other	225	191	202	256	244	191	274	270	311	223
24 Other Federal Reserve liabilities and capital	18,728	19,105	18,401	18,108	18,552	18,485	18,380	17,775	17,991	17,951
25 Reserve balances with Federal Reserve Banks[5]	11,194	14,088	8,395	6,641	13,563	9,916	6,634	7,879	12,459[r]	8,479

1. Amounts of cash held as reserves are shown in table 1.12, line 2.
2. Includes securities loaned—fully guaranteed by U.S. government securities pledged with Federal Reserve Banks—and excludes securities sold and scheduled to be bought back under matched sale–purchase transactions.
3. Includes compensation that adjusts for the effects of inflation on the principal of inflation-indexed securities.
4. Cash value of agreements arranged through third-party custodial banks. These agreements are collateralized by U.S. government and federal agency securities.
5. Excludes required clearing balances and adjustments to compensate for float.

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	Prorated monthly averages of biweekly averages									
	1996	1997	1998	1999						
	Dec.	Dec.	Dec.	Apr.	May	June	July	Aug.	Sept.	Oct.
1 Reserve balances with Reserve Banks[2]	13,330	10,664	9,021	9,238	10,070	8,539	7,797	7,802	7,698	6,769[r]
2 Total vault cash[3]	44,525	44,740	44,305	42,164	42,459	42,632	44,059	44,664	44,519	47,019
3 Applied vault cash[4]	37,844	37,255	35,997	34,407	34,805	33,856	34,005	34,069	34,089	33,933
4 Surplus vault cash[5]	6,681	7,485	8,308	7,757	7,654	8,776	10,054	10,595	10,430	13,086
5 Total reserves[6]	51,174	47,920	45,018	43,645	44,875	42,394	41,802	41,871	41,787	40,702[r]
6 Required reserves	49,758	46,235	43,435	42,486	43,619	41,133	40,726	40,742	40,590	39,548[r]
7 Excess reserve balances at Reserve Banks[7]	1,416	1,685	1,583	1,159	1,256	1,261	1,076	1,129	1,197	1,154[r]
8 Total borrowing at Reserve Banks	155	324	117	166	127	145	309	344	338	281
9 Adjustment	87	245	101	128	39	18	83	72	56	52
10 Seasonal	68	79	15	39	89	127	226	271	282	221
11 Special Liquidity Facility[8]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	8
12 Extended credit[9]	0	0	0	0	0	0	0	0	0	0
	Biweekly averages of daily figures for two week periods ending on dates indicated									
	1999									
	June 30	July 14	July 28	Aug. 11	Aug. 25	Sept. 8	Sept. 22	Oct. 6	Oct. 20	Nov. 3
1 Reserve balances with Reserve Banks[2]	8,309	7,526	8,041	7,923	7,421	8,470	7,440	7,380	6,544	6,722[r]
2 Total vault cash[3]	43,426	44,019	43,899	44,994	44,786	43,774	44,556	45,199	47,350	47,593
3 Applied vault cash[4]	34,062	33,788	34,198	34,123	34,003	34,126	34,327	33,636	33,998	34,013
4 Surplus vault cash[5]	9,365	10,231	9,702	10,871	10,783	9,648	10,229	11,563	13,352	13,580
5 Total reserves[6]	42,371	41,314	42,238	42,046	41,423	42,596	41,766	41,016	40,542	40,735[r]
6 Required reserves	41,027	40,303	41,098	40,967	40,289	41,388	40,744	39,524	39,408	39,740[r]
7 Excess reserve balances at Reserve Banks[7]	1,343	1,011	1,140	1,078	1,134	1,207	1,022	1,491	1,133	995[r]
8 Total borrowing at Reserve Banks	180	331	266	409	304	318	323	385	265	246
9 Adjustment	23	136	17	146	31	35	48	91	21	72
10 Seasonal	158	196	249	263	273	284	276	294	244	153
11 Special Liquidity Facility[8]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1	1	22
12 Extended credit[9]	0	0	0	0	0	0	0	0	0	0

1. Data in this table also appear in the Board's H.3 (502) weekly statistical release. For ordering address, see inside front cover. Data are not break-adjusted or seasonally adjusted.
2. Excludes required clearing balances and adjustments to compensate for float and includes other off-balance-sheet "as-of" adjustments.
3. Vault cash eligible to satisfy reserve requirements. It includes only vault cash held by those banks and thrift institutions that are not exempt from reserve requirements. Dates refer to the maintenance periods in which the vault cash can be used to satisfy reserve requirements.
4. All vault cash held during the lagged computation period by "bound" institutions (that is, those whose required reserves exceed their vault cash) plus the amount of vault cash applied during the maintenance period by "nonbound" institutions (that is, those whose vault cash exceeds their required reserves) to satisfy current reserve requirements.
5. Total vault cash (line 2) less applied vault cash (line 3).
6. Reserve balances with Federal Reserve Banks (line 1) plus applied vault cash (line 3).
7. Total reserves (line 5) less required reserves (line 6).
8. Borrowing at the discount window under the terms and conditions established for the Century Date Change Special Liquidity Facility in effect from October 1, 1999 through April 7, 2000.
9. Consists of borrowing at the discount window under the terms and conditions established for the extended credit program to help depository institutions deal with sustained liquidity pressures. Because there is not the same need to repay such borrowing promptly as with traditional short-term adjustment credit, the money market effect of extended credit is similar to that of nonborrowed reserves.

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Current and previous levels

Federal Reserve Bank	Adjustment credit[1]			Seasonal credit[2]			Extended credit[3]			Special Liquidity Facility credit[4]		
	On 12/10/99	Effective date	Previous rate	On 12/10/99	Effective date	Previous rate	On 12/10/99	Effective date	Previous rate	On 12/10/99	Effective date	Previous rate
Boston	5.00	11/16/99	4.75	5.75	12/2/99	5.65	6.25	12/2/99	6.15	7.00	11/16/99	6.75
New York		11/18/99										
Philadelphia		11/18/99										
Cleveland		11/16/99										
Richmond		11/16/99										
Atlanta		11/17/99										
Chicago		11/18/99										
St. Louis		11/18/99										
Minneapolis		11/18/99										
Kansas City		11/16/99										
Dallas		11/17/99										
San Francisco	5.00	11/16/99	4.75	5.75	12/2/99	5.65	6.25	12/2/99	6.15	7.00	11/16/99	6.75

Range of rates for adjustment credit in recent years[5]

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
In effect Dec. 31, 1977	6	6
1978—Jan. 9	6–6.5	6.5
20	6.5	6.5
May 11	6.5–7	7
12	7	7
July 3	7–7.25	7.25
10	7.25	7.25
Aug. 21	7.75	7.75
Sept. 22	8	8
Oct. 16	8–8.5	8.5
20	8.5	8.5
Nov. 1	8.5–9.5	9.5
3	9.5	9.5
1979—July 20	10	10
Aug. 17	10–10.5	10.5
20	10.5	10.5
Sept. 19	10.5–11	11
21	11	11
Oct. 8	11–12	12
10	12	12
1980—Feb. 15	12–13	13
19	13	13
May 29	12–13	13
30	12	12
June 13	11–12	11
16	11	11
July 28	10–11	10
29	10	10
Sept. 26	11	11
Nov. 17	12	12
Dec. 5	12–13	13
8	13	13
1981—May 5	13–14	14
8	14	14
Nov. 2	13–14	13
6	13	13
Dec. 4	12	12

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
1982—July 20	11.5–12	11.5
23	11.5	11.5
Aug. 2	11–11.5	11
3	11	11
16	10.5	10.5
27	10–10.5	10
30	10	10
Oct. 12	9.5–10	9.5
13	9.5	9.5
Nov. 22	9–9.5	9
26	9	9
Dec. 14	8.5–9	9
15	8.5–9	8.5
17	8.5	8.5
1984—Apr. 9	8.5–9	9
13	9	9
Nov. 21	8.5–9	8.5
26	8.5	8.5
Dec. 24	8	8
1985—May 20	7.5–8	7.5
24	7.5	7.5
1986—Mar. 7	7–7.5	7
10	7	7
Apr. 21	6.5–7	6.5
23	6.5	6.5
July 11	6	6
Aug. 21	5.5–6	5.5
22	5.5	5.5
1987—Sept. 4	5.5–6	6
11	6	6
1988—Aug. 9	6–6.5	6.5
11	6.5	6.5
1989—Feb. 24	6.5–7	7
27	7	7

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
1990—Dec. 19	6.5	6.5
1991—Feb. 1	6–6.5	6
4	6	6
Apr. 30	5.5–6	5.5
May 2	5.5	5.5
Sept. 13	5–5.5	5
17	5	5
Nov. 6	4.5–5	4.5
7	4.5	4.5
Dec. 20	3.5–4.5	3.5
24	3.5	3.5
1992—July 2	3–3.5	3
7	3	3
1994—May 17	3–3.5	3.5
18	3.5	3.5
Aug. 16	3.5–4	4
18	4	4
Nov. 15	4–4.75	4.75
17	4.75	4.75
1995—Feb. 1	4.75–5.25	5.25
9	5.25	5.25
1996—Jan. 31	5.00–5.25	5.00
Feb. 5	5.00	5.00
1998—Oct. 15	4.75–5.00	4.75
16	4.75	4.75
Nov. 17	4.50–4.75	4.50
19	4.50	4.50
1999—Aug. 24	4.50–4.75	4.75
26	4.75	4.75
Nov. 16	4.75–5.00	4.75
18	5.00	5.00
In effect Dec. 10, 1999	5.00	5.00

1. Available on a short-term basis to help depository institutions meet temporary needs for funds that cannot be met through reasonable alternative sources. The highest rate established for loans to depository institutions may be charged on adjustment credit loans of unusual size that result from a major operating problem at the borrower's facility.

2. Available to help relatively small depository institutions meet regular seasonal needs for funds that arise from a clear pattern of intrayearly movements in their deposits and loans and that cannot be met through special industry lenders. The discount rate on seasonal credit takes into account rates charged by market sources of funds and ordinarily is reestablished on the first business day of each two-week reserve maintenance period; however, it is never less than the discount rate applicable to adjustment credit.

3. May be made available to depository institutions when similar assistance is not reasonably available from other sources, including special industry lenders. Such credit may be provided when exceptional circumstances (including sustained deposit drains, impaired access to money market funds, or sudden deterioration in loan repayment performance) or practices involve only a particular institution, or to meet the needs of institutions experiencing difficulties adjusting to changing market conditions over a longer period (particularly at times of deposit disintermediation). The discount rate applicable to adjustment credit ordinarily is charged on extended-credit loans outstanding less than thirty days; however, at the discretion of the Federal Reserve Bank, this time period may be shortened. Beyond this initial period, a flexible rate somewhat above rates charged on market sources of funds is charged. The rate ordinarily is reestablished on the first business day of each two-week reserve maintenance period, but it is never less than the discount rate applicable to adjustment credit plus 50 basis points.

4. Available in the period between October 1, 1999, and April 7, 2000, to help depository institutions in sound financial condition meet unusual needs for funds in the period around the century date change. The interest rate on loans from the special facility is the Federal Open Market Committee's intended federal funds rate plus 150 basis points.

5. For earlier data, see the following publications of the Board of Governors: *Banking and Monetary Statistics, 1914–1941*, and *1941–1970*; and the *Annual Statistical Digest, 1970–1979*.

In 1980 and 1981, the Federal Reserve applied a surcharge to short-term adjustment-credit borrowings by institutions with deposits of $500 million or more that had borrowed in successive weeks or in more than four weeks in a calendar quarter. A 3 percent surcharge was in effect from Mar. 17, 1980, through May 7, 1980. A surcharge of 2 percent was reimposed on Nov. 17, 1980; the surcharge was subsequently raised to 3 percent on Dec. 5, 1980, and to 4 percent on May 5, 1981. The surcharge was reduced to 3 percent effective Sept. 22, 1981, and to 2 percent effective Oct. 12, 1981. As of Oct. 1, 1981, the formula for applying the surcharge was changed from a calendar quarter to a moving thirteen-week period. The surcharge was eliminated on Nov. 17, 1981.

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS[1]

Type of deposit	Requirement	
	Percentage of deposits	Effective date
Net transaction accounts[2]		
1 $0 million–$44.3 million[3]	3	12/30/99
2 More than $44.3 million[4]	10	12/30/99
3 Nonpersonal time deposits[5]	0	12/27/90
4 Eurocurrency liabilities[6]	0	12/27/90

1. Required reserves must be held in the form of deposits with Federal Reserve Banks or vault cash. Nonmember institutions may maintain reserve balances with a Federal Reserve Bank indirectly, on a pass-through basis, with certain approved institutions. For previous reserve requirements, see earlier editions of the *Annual Report* or the *Federal Reserve Bulletin.* Under the Monetary Control Act of 1980, depository institutions include commercial banks, savings banks, savings and loan associations, credit unions, agencies and branches of foreign banks, and Edge Act corporations.

2. Transaction accounts include all deposits against which the account holder is permitted to make withdrawals by negotiable or transferable instruments, payment orders of withdrawal, or telephone or preauthorized transfers for the purpose of making payments to third persons or others. However, accounts subject to the rules that permit no more than six preauthorized, automatic, or other transfers per month (of which no more than three may be by check, draft, debit card, or similar order payable directly to third parties) are savings deposits, not transaction accounts.

3. The Monetary Control Act of 1980 requires that the amount of transaction accounts against which the 3 percent reserve requirement applies be modified annually by 80 percent of the percentage change in transaction accounts held by all depository institutions, determined as of June 30 of each year. Effective with the reserve maintenance period beginning December 30, 1999, for depository institutions that report weekly, and with the period beginning January 20, 2000, for institutions that report quarterly, the amount was decreased from $46.5 million to $44.3 million.

Under the Garn–St Germain Depository Institutions Act of 1982, the Board adjusts the amount of reservable liabilities subject to a zero percent reserve requirement each year for the succeeding calendar year by 80 percent of the percentage increase in the total reservable liabilities of all depository institutions, measured on an annual basis as of June 30. No corresponding adjustment is made in the event of a decrease. The exemption applies only to accounts that would be subject to a 3 percent reserve requirement. Effective with the reserve maintenance period beginning December 30, 1999, for depository institutions that report weekly, and with the period beginning January 20, 2000, for institutions that report quarterly, the exemption was raised from $4.9 million to $5.0 million.

4. The reserve requirement was reduced from 12 percent to 10 percent on Apr. 2, 1992, for institutions that report weekly, and on Apr. 16, 1992, for institutions that report quarterly.

5. For institutions that report weekly, the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years was reduced from 3 percent to 1½ percent for the maintenance period that began Dec. 13, 1990, and to zero for the maintenance period that began Dec. 27, 1990. For institutions that report quarterly, the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years was reduced from 3 percent to zero on Jan. 17, 1991.

The reserve requirement on nonpersonal time deposits with an original maturity of 1½ years or more has been zero since Oct. 6, 1983.

6. The reserve requirement on Eurocurrency liabilities was reduced from 3 percent to zero in the same manner and on the same dates as the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years (see note 5).

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS[1]

Millions of dollars

Type of transaction and maturity	1996	1997	1998	1999						
				Mar.	Apr.	May	June	July	Aug.	Sept.
U.S. TREASURY SECURITIES[2]										
Outright transactions (excluding matched transactions)										
Treasury bills										
1 Gross purchases	9,901	9,147	3,550	0	0	0	0	0	0	0
2 Gross sales	0	0	0	0	0	0	0	0	0	0
3 Exchanges	426,928	436,257	450,835	35,065	48,142	37,107	35,045	42,037	37,052	42,643
4 For new bills	426,928	435,907	450,835	35,065	48,142	37,107	35,045	42,037	37,052	42,643
5 Redemptions	0	0	2,000	0	0	0	0	0	0	0
Others within one year										
6 Gross purchases	524	5,549	6,297	1,060	1,677	1,421	880	951	429	960
7 Gross sales	0	0	0	0	0	0	0	0	0	0
8 Maturity shifts	30,512	41,716	46,062	3,015	3,768	3,768	2,740	3,279	7,669	3,468
9 Exchanges	−41,394	−27,499	−49,434	−5,956	−3,370	−4,607	−5,540	−368	−10,798	−2,125
10 Redemptions	2,015	1,996	2,676	0	726	0	0	41	0	0
One to five years										
11 Gross purchases	3,898	20,080	12,901	2,428	3,362	4,442	948	0	1,272	0
12 Gross sales	0	0	0	0	0	0	0	0	0	0
13 Maturity shifts	−25,022	−37,987	−37,777	−3,015	−3,768	−3,768	−2,740	−3,279	−4,751	−3,468
14 Exchanges	31,459	20,274	37,154	5,956	3,020	2,562	5,540	0	8,433	2,125
Five to ten years										
15 Gross purchases	1,116	3,449	2,294	346	945	1,584	65	0	447	0
16 Gross sales	0	0	0	0	0	0	0	0	0	0
17 Maturity shifts	−5,469	−1,954	−5,908	0	0	0	0	0	−2,918	0
18 Exchanges	6,666	5,215	7,439	0	0	2,045	0	373	1,290	0
More than ten years										
19 Gross purchases	1,655	5,897	4,884	2,404	262	2,890	0	0	1,075	0
20 Gross sales	0	0	0	0	0	0	0	0	0	0
21 Maturity shifts	−20	−1,775	−2,377	0	0	0	0	0	0	0
22 Exchanges	3,270	2,360	4,842	0	350	0	0	0	1,075	0
All maturities										
23 Gross purchases	17,094	44,122	29,926	6,238	6,246	10,337	1,893	951	3,223	960
24 Gross sales	0	0	0	0	0	0	0	0	0	0
25 Redemptions	2,015	1,996	4,676	0	726	0	0	41	0	0
Matched transactions										
26 Gross purchases	3,092,399	3,577,954	4,395,430	393,267	366,838	356,960	380,872	347,067	374,032	348,014
27 Gross sales	3,094,769	3,580,274	4,399,330	394,865	364,476	358,362	380,464	346,747	373,159	350,151
Repurchase agreements										
28 Gross purchases	457,568	810,485	512,671	62,878	45,067	27,605	17,710	27,707	23,097	29,369
29 Gross sales	450,359	809,268	514,186	53,706	48,867	30,531	14,614	33,612	23,717	24,337
30 Net change in U.S. Treasury securities	19,919	41,022	19,835	13,812	4,082	6,008	5,397	−4,675	3,476	3,855
FEDERAL AGENCY OBLIGATIONS										
Outright transactions										
31 Gross purchases	0	0	0	0	0	0	0	0	0	0
32 Gross sales	0	0	25	0	0	0	0	0	0	0
33 Redemptions	409	1,540	322	25	0	0	52	10	11	0
Repurchase agreements										
34 Gross purchases	75,354	160,409	284,316	35,731	20,623	38,167	32,786	46,941	61,968	53,224
35 Gross sales	74,842	159,369	276,266	34,009	22,937	36,962	32,104	48,840	56,053	47,963
36 Net change in federal agency obligations	103	−500	7,703	1,697	−2,314	1,205	630	−1,909	5,904	5,261
37 **Total net change in System Open Market Account**	**20,021**	**40,522**	**27,538**	**15,509**	**1,768**	**7,213**	**6,028**	**−6,584**	**9,380**	**9,116**

1. Sales, redemptions, and negative figures reduce holdings of the System Open Market Account; all other figures increase such holdings.

2. Transactions exclude changes in compensation for the effects of inflation on the principal of inflation-indexed securities.

1.18 FEDERAL RESERVE BANKS Condition and Federal Reserve Note Statements[1]

Millions of dollars

Account	Wednesday 1999					End of month 1999		
	Sept. 29	Oct. 6	Oct. 13	Oct. 20	Oct. 27	Aug. 31	Sept. 30	Oct. 31
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,048	11,050	11,051	11,050	11,050	11,045	11,047	11,049
2 Special drawing rights certificate account	7,200	7,200	7,200	7,200	7,200	8,200	7,200	7,200
3 Coin	287	298	304	317	317	294	298	331
Loans								
4 To depository institutions	418	419	261	228	211	338	480	173
5 Other	0	0	0	0	0	0	0	0
6 Acceptances held under repurchase agreements	0	0	0	0	0	0	0	0
Triparty Obligations								
7 Repurchase agreements—triparty[2]	n.a.	4,011	15,520	23,550	20,065	n.a.	n.a.	22,560
Federal agency obligations[3]								
8 Bought outright	238	228	198	198	188	238	238	188
9 Held under repurchase agreements	11,183	7,110	0	0	0	9,195	14,456	0
10 **Total U.S. Treasury securities**[3]	**496,239**	**493,426**	**491,282**	**491,367**	**492,051**	**492,773**	**496,644**	**490,738**
11 Bought outright[4]	491,019	491,266	491,282	491,367	492,051	490,198	489,037	490,738
12 Bills	199,165	199,410	199,423	199,669	200,350	199,320	197,183	199,035
13 Notes	211,801	211,803	211,806	211,270	211,272	210,829	211,801	211,273
14 Bonds	80,053	80,053	80,054	80,428	80,429	80,049	80,053	80,430
15 Held under repurchase agreements	5,220	2,160	0	0	0	2,575	7,607	0
16 **Total loans and securities**	**508,078**	**505,194**	**507,261**	**515,343**	**512,515**	**502,544**	**511,817**	**513,659**
17 Items in process of collection	6,978	9,050	13,877	7,656	6,656	9,328	5,649	4,726
18 Bank premises	1,337	1,340	1,341	1,342	1,341	1,332	1,336	1,344
Other assets								
19 Denominated in foreign currencies[5]	15,861	16,108	16,112	16,116	16,120	15,845	16,105	16,251
20 All other[6]	17,149	16,721	16,937	17,108	17,464	15,445	16,864	17,678
21 **Total assets**	**567,937**	**566,961**	**574,084**	**576,132**	**572,664**	**564,033**	**570,317**	**572,239**
LIABILITIES								
22 Federal Reserve notes	517,199	520,697	524,543	525,927	528,449	511,545	517,035	528,509
23 Reverse repurchase agreements—triparty[2]	n.a.	0	0	0	0	n.a.	n.a.	0
24 **Total deposits**	**25,609**	**19,778**	**20,927**	**25,035**	**19,533**	**24,750**	**28,759**	**20,420**
25 Depository institutions	16,996	14,067	15,424	19,633	14,775	18,800	21,684	15,502
26 U.S. Treasury—General account	8,232	5,259	4,948	4,925	4,363	5,559	6,641	4,527
27 Foreign—Official accounts	191	178	284	167	172	166	243	189
28 Other	191	274	270	311	223	225	191	202
29 Deferred credit items	6,643	8,106	10,839	7,179	6,730	9,011	5,418	4,909
30 Other liabilities and accrued dividends[7]	5,012	4,683	4,262	4,463	4,444	4,605	5,323	4,455
31 **Total liabilities**	**554,464**	**553,263**	**560,570**	**562,604**	**559,156**	**549,911**	**556,535**	**558,293**
CAPITAL ACCOUNTS								
32 Capital paid in	6,329	6,333	6,336	6,337	6,354	6,308	6,330	6,355
33 Surplus	5,952	5,952	5,952	5,952	5,952	5,952	5,952	5,952
34 Other capital accounts	1,192	1,412	1,225	1,239	1,201	1,863	1,499	1,639
35 **Total liabilities and capital accounts**	**567,937**	**566,961**	**574,084**	**576,132**	**572,664**	**564,033**	**570,317**	**572,239**
MEMO								
36 Marketable U.S. Treasury securities held in custody for foreign and international accounts	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Federal Reserve note statement							
37 Federal Reserve notes outstanding (issued to Banks)	824,276	828,182	827,718	828,391	827,758	780,358	827,075	827,249
38 LESS: Held by Federal Reserve Banks	307,076	307,485	303,175	302,464	299,309	268,813	310,040	298,740
39 Federal Reserve notes, net	517,199	520,697	524,543	525,927	528,449	511,545	517,035	528,509
Collateral held against notes, net								
40 Gold certificate account	11,048	11,050	11,051	11,050	11,050	11,045	11,047	11,049
41 Special drawing rights certificate account	7,200	7,200	7,200	7,200	7,200	8,200	7,200	7,200
42 Other eligible assets	0	0	0	0	0	0	0	0
43 U.S. Treasury and agency securities	498,952	502,447	506,292	507,677	510,199	492,300	498,788	510,261
44 **Total collateral**	**517,199**	**520,697**	**524,543**	**525,927**	**528,449**	**511,545**	**517,035**	**528,509**

1. Some of the data in this table also appear in the Board's H.4.1 (503) weekly statistical release. For ordering address, see inside front cover.
2. Cash value of agreements arranged through third-party custodial banks.
3. Face value of the securities.
4. Includes securities loaned—fully guaranteed by U.S. Treasury securities pledged with Federal Reserve Banks—and includes compensation that adjusts for the effects of inflation on the principal of inflation-indexed securities. Excludes securities sold and scheduled to be bought back under matched sale–purchase transactions.
5. Valued monthly at market exchange rates.
6. Includes special investment account at the Federal Reserve Bank of Chicago in Treasury bills maturing within ninety days.
7. Includes exchange-translation account reflecting the monthly revaluation at market exchange rates of foreign exchange commitments.

1.19 FEDERAL RESERVE BANKS Maturity Distribution of Loan and Security Holding

Millions of dollars

Type of holding and maturity	Wednesday					End of month		
	1999					1999		
	Sept. 29	Oct. 6	Oct. 13	Oct. 20	Oct. 27	Aug. 31	Sept. 30	Oct. 31
1 **Total loans**	**418**	**419**	**261**	**228**	**211**	**338**	**480**	**173**
2 Within fifteen days[1]	372	192	72	198	181	189	330	106
3. Sixteen days to ninety days	46	227	189	30	29	149	150	66
4 **Total U.S. Treasury securities**[2]	**496,239**	**493,426**	**491,282**	**491,367**	**492,051**	**492,763**	**496,644**	**490,738**
5 Within fifteen days[1]	19,310	14,900	14,978	10,793	10,377	11,187	10,704	7,085
6 Sixteen days to ninety days	97,374	99,028	102,323	101,936	103,172	100,038	96,836	105,645
7 Ninety-one days to one year	142,227	143,316	137,796	142,077	141,937	144,224	152,924	141,442
8 One year to five years	122,349	121,199	121,200	121,200	121,200	122,346	121,199	121,201
9 Five years to ten years	50,204	50,205	50,207	50,209	50,211	50,195	50,204	50,212
10 More than ten years	64,777	64,777	64,778	65,152	65,153	64,773	64,777	65,153
11 **Total federal agency obligations**	**11,421**	**7,388**	**198**	**198**	**188**	**5,168**	**14,694**	**188**
12 Within fifteen days[1]	11,223	7,140	10	10	7	4,930	14,496	7
13 Sixteen days to ninety days	17	17	7	7	6	27	17	6
14 Ninety-one days to one year	51	51	51	51	45	41	51	45
15 One year to five years	10	10	10	10	10	20	10	10
16 Five years to ten years	120	120	120	120	120	150	120	120
17 More than ten years	0	0	0	0	0	0	0	0

1. Holdings under repurchase agreements are classified as maturing within fifteen days in accordance with maximum maturity of the agreements.

2. Includes compensation that adjusts for the effects of inflation on the principal of inflation-indexed securities.

1.20 AGGREGATE RESERVES OF DEPOSITORY INSTITUTIONS AND MONETARY BASE[1]

Billions of dollars, averages of daily figures

Item	1995 Dec.	1996 Dec.	1997 Dec.	1998 Dec.	1999							
					Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]	Seasonally adjusted											
1 Total reserves[3]	56.45	50.16	46.86	44.90	43.72	43.98	44.36	42.87	41.98	42.07	42.11	40.95
2 Nonborrowed reserves[4]	56.20	50.01	46.54	44.79	43.65	43.81	44.23	42.72	41.67	41.72	41.77	40.66
3 Nonborrowed reserves plus extended credit[5]	56.20	50.01	46.54	44.79	43.65	43.81	44.23	42.72	41.67	41.72	41.77	40.66
4 Required reserves	55.16	48.75	45.18	43.32	42.41	42.82	43.11	41.61	40.90	40.94	40.92	39.79
5 Monetary base[6]	434.10	451.37	478.88	512.32	524.23	528.74	534.86	537.63	541.20	544.42[r]	549.56[r]	557.10
	Not seasonally adjusted											
6 Total reserves[7]	58.02	51.45	48.01	45.12	43.14	43.67	44.91	42.43	41.85	41.92	41.85	40.77
7 Nonborrowed reserves	57.76	51.30	47.69	45.00	43.08	43.50	44.78	42.29	41.54	41.58	41.51	40.49
8 Nonborrowed reserves plus extended credit[5]	57.76	51.30	47.69	45.00	43.08	43.50	44.78	42.29	41.54	41.58	41.51	40.49
9 Required reserves[8]	56.73	50.04	46.33	43.54	41.84	42.51	43.65	41.17	40.77	40.79	40.65	39.62
10 Monetary base[9]	439.03	456.63	484.98	518.28	523.35	526.77	533.12	535.88	540.98	543.87	548.13[r]	555.46
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[10]												
11 Total reserves[11]	57.90	51.17	47.92	45.02	43.12	43.65	44.88	42.39	41.80	41.87	41.79	40.70
12 Nonborrowed reserves	57.64	51.02	47.60	44.90	43.06	43.48	44.75	42.25	41.49	41.53	41.45	40.42
13 Nonborrowed reserves plus extended credit[5]	57.64	51.02	47.60	44.90	43.06	43.48	44.75	42.25	41.49	41.53	41.45	40.42
14 Required reserves	56.61	49.76	46.24	43.44	41.82	42.49	43.62	41.13	40.73	40.74	40.59	39.55
15 Monetary base[12]	444.45	463.40	491.79	525.06	530.30	533.49	539.98	542.82	548.07	550.86	555.19[r]	562.59
16 Excess reserves[13]	1.29	1.42	1.69	1.58	1.31	1.16	1.26	1.26	1.08	1.13	1.20	1.16
17 Borrowings from the Federal Reserve	.26	.16	.32	.12	.07	.17	.13	.15	.31	.34	.34	.28

1. Latest monthly and biweekly figures are available from the Board's H.3 (502) weekly statistical release. Historical data starting in 1959 and estimates of the effect on required reserves of changes in reserve requirements are available from the Money and Reserves Projections Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, DC 20551.

2. Figures reflect adjustments for discontinuities, or "breaks," associated with regulatory changes in reserve requirements. (See also table 1.10.)

3. Seasonally adjusted, break-adjusted total reserves equal seasonally adjusted, break-adjusted required reserves (line 4) plus excess reserves (line 16).

4. Seasonally adjusted, break-adjusted nonborrowed reserves equal seasonally adjusted, break-adjusted total reserves (line 1) less total borrowings of depository institutions from the Federal Reserve (line 17).

5. Extended credit consists of borrowing at the discount window under the terms and conditions established for the extended credit program to help depository institutions deal with sustained liquidity pressures. Because there is not the same need to repay such borrowing promptly as with traditional short-term adjustment credit, the money market effect of extended credit is similar to that of nonborrowed reserves.

6. The seasonally adjusted, break-adjusted monetary base consists of (1) seasonally adjusted, break-adjusted total reserves (line 1), plus (2) the seasonally adjusted currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all those weekly reporters whose vault cash exceeds their required reserves) the seasonally adjusted, break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

7. Break-adjusted total reserves equal break-adjusted required reserves (line 9) plus excess reserves (line 16).

8. To adjust required reserves for discontinuities that are due to regulatory changes in reserve requirements, a multiplicative procedure is used to estimate what required reserves would have been in past periods had current reserve requirements been in effect. Break-adjusted required reserves include required reserves against transactions deposits and nonpersonal time and savings deposits (but not reservable nondeposit liabilities).

9. The break-adjusted monetary base equals (1) break-adjusted total reserves (line 6), plus (2) the (unadjusted) currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all those weekly reporters whose vault cash exceeds their required reserves) the break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

10. Reflects actual reserve requirements, including those on nondeposit liabilities, with no adjustments to eliminate the effects of discontinuities associated with regulatory changes in reserve requirements.

11. Reserve balances with Federal Reserve Banks plus vault cash used to satisfy reserve requirements.

12. The monetary base, not break-adjusted and not seasonally adjusted, consists of (1) total reserves (line 11), plus (2) required clearing balances and adjustments to compensate for float at Federal Reserve Banks, plus (3) the currency component of the money stock, plus (4) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all those weekly reporters whose vault cash exceeds their required reserves) the difference between current vault cash and the amount applied to satisfy current reserve requirements. Since February 1984, currency and vault cash figures have been measured over the computation periods ending on Mondays.

13. Unadjusted total reserves (line 11) less unadjusted required reserves (line 14).

1.21 MONEY STOCK AND DEBT MEASURES[1]

Billions of dollars, averages of daily figures

Item	1995 Dec.	1996 Dec.	1997 Dec.	1998 Dec.	1999 July[r]	1999 Aug.[r]	1999 Sept.[r]	1999 Oct.
	Seasonally adjusted							
Measures[2]								
1 M1	1,126.7	1,081.3	1,074.9	1,093.4	1,099.5	1,102.4	1,093.4	1,098.4
2 M2	3,649.1	3,823.9	4,046.4	4,401.0	4,543.1	4,564.5	4,583.1	4,602.2
3 M3	4,618.5	4,955.6	5,403.4	5,995.8	6,191.6	6,218.6	6,253.1	6,306.8
4 Debt	13,716.1	14,460.8	15,223.5	16,243.3[r]	16,851.1	16,937.6	17,029.0	n.a.
M1 components								
5 Currency[3]	372.3	394.1	424.5	459.2	487.3	490.9	495.0	499.1
6 Travelers checks[4]	8.3	8.0	7.7	7.8	8.6	8.6	8.3	8.1
7 Demand deposits[5]	389.4	403.0	396.5	377.5	362.7	363.3	352.8	354.5
8 Other checkable deposits[6]	356.7	276.2	246.2	248.8	240.9	239.6	237.4	236.8
Nontransaction components								
9 In M2[7]	2,522.4	2,742.6	2,971.5	3,307.6	3,443.6	3,462.1	3,489.6	3,503.7
10 In M3 only[8]	969.4	1,131.7	1,357.0	1,594.8	1,648.6	1,654.1	1,670.0	1,704.6
Commercial banks								
11 Savings deposits, including MMDAs	775.3	905.2	1,022.9	1,189.8	1,260.8	1,269.2	1,284.4	1,288.9
12 Small time deposits[9]	575.0	593.7	626.1	626.0	613.1	614.8	618.6	622.0
13 Large time deposits[10, 11]	346.6	414.8	490.2	541.0	539.6	537.3	550.1	578.7
Thrift institutions								
14 Savings deposits, including MMDAs	359.8	367.1	377.3	415.2	455.0	456.6	458.3	456.8
15 Small time deposits[9]	356.7	353.8	343.2	325.9	311.7	312.0	312.9	314.1
16 Large time deposits[10]	74.5	78.4	85.9	89.1	88.7	89.1	89.9	89.3
Money market mutual funds								
17 Retail	455.5	522.8	602.0	750.7	802.9	809.5	815.4	821.9
18 Institution-only	255.9	313.3	379.9	516.2	546.0	556.4	559.3	571.0
Repurchase agreements and Eurodollars								
19 Repurchase agreements[12]	198.7	211.3	251.7	297.8	308.6	310.2	309.7	306.6
20 Eurodollars[12]	93.7	113.9	149.3	150.7	165.6	161.1	161.0	159.0
Debt components								
21 Federal debt	3,639.1	3,781.3	3,800.3	3,750.8	3,708.0	3,711.0	3,698.1	n.a.
22 Nonfederal debt	10,077.0	10,679.5	11,423.2	12,492.6[r]	13,143.1	13,226.6	13,330.9	n.a.
	Not seasonally adjusted							
Measures[2]								
23 M1	1,152.4	1,104.9	1,097.4	1,115.3	1,098.1	1,097.6	1,088.1	1,095.7
24 M2	3,671.7	3,843.7	4,064.6	4,417.8	4,533.3	4,558.9	4,568.8	4,586.7
25 M3	4,638.0	4,972.5	5,419.6	6,011.9	6,162.3	6,201.6	6,225.0	6,289.9
26 Debt	13,716.6	14,459.3	15,220.6	16,240.2[r]	16,785.3	16,875.8	16,973.3	n.a.
M1 components								
27 Currency[3]	376.2	397.9	428.9	464.2	487.7	490.2	493.4	498.9
28 Travelers checks[4]	8.5	8.3	7.9	8.0	8.3	8.2	8.1	8.0
29 Demand deposits[5]	407.2	419.9	412.3	392.4	362.7	361.9	350.8	353.9
30 Other checkable deposits[6]	360.5	278.8	248.3	250.7	239.4	237.3	235.7	234.9
Nontransaction components								
31 In M2[7]	2,519.3	2,738.9	2,967.2	3,302.5	3,435.2	3,461.3	3,480.7	3,491.0
32 In M3 only[8]	966.4	1,128.8	1,355.0	1,594.1	1,629.0	1,642.7	1,656.2	1,703.2
Commercial banks								
33 Savings deposits, including MMDAs	774.1	903.3	1,020.4	1,186.8	1,261.7	1,268.4	1,277.5	1,279.5
34 Small time deposits[9]	573.8	592.7	625.3	625.4	612.9	614.4	618.3	622.8
35 Large time deposits[10, 11]	345.8	413.3	487.7	537.4	539.4	537.5	550.5	581.7
Thrift institutions								
36 Savings deposits, including MMDAs	359.2	366.3	376.4	414.1	455.4	456.3	455.8	453.5
37 Small time deposits[9]	355.9	353.2	342.8	325.6	311.6	311.8	312.7	314.5
38 Large time deposits[10]	74.3	78.1	85.4	88.5	88.6	89.2	90.0	89.8
Money market mutual funds								
39 Retail	456.1	523.2	602.3	750.6	793.7	810.4	816.4	820.7
40 Institution-only	257.7	316.0	384.5	523.3	533.4	548.0	547.5	566.7
Repurchase agreements and Eurodollars								
41 Repurchase agreements[12]	193.8	205.7	245.1	290.5	305.9	308.4	308.4	305.2
42 Eurodollars[12]	94.9	115.7	152.3	154.5	161.6	159.7	159.9	159.8
Debt components								
43 Federal debt	3,645.9	3,787.9	3,805.8	3,754.9	3,652.2	3,665.8	3,655.8	n.a.
44 Nonfederal debt	10,070.7	10,671.4	11,414.8	12,485.2[r]	13,133.2	13,210.0	13,317.5	n.a.

Footnotes appear on following page.

NOTES TO TABLE 1.21

1. Latest monthly and weekly figures are available from the Board's H.6 (508) weekly statistical release. Historical data starting in 1959 are available from the Money and Reserves Projections Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, DC 20551.

2. Composition of the money stock measures and debt is as follows:

M1: (1) currency outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions, (2) travelers checks of nonbank issuers, (3) demand deposits at all commercial banks other than those owed to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float, and (4) other checkable deposits (OCDs), consisting of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at depository institutions, credit union share draft accounts, and demand deposits at thrift institutions. Seasonally adjusted M1 is computed by summing currency, travelers checks, demand deposits, and OCDs, each seasonally adjusted separately.

M2: M1 plus (1) savings deposits (including MMDAs), (2) small-denomination time deposits (time deposits—including retail RPs—in amounts of less than $100,000), and (3) balances in retail money market mutual funds. Excludes individual retirement accounts (IRAs) and Keogh balances at depository institutions and money market funds. Seasonally adjusted M2 is calculated by summing savings deposits, small-denomination time deposits, and retail money fund balances, each seasonally adjusted separately, and adding this result to seasonally adjusted M1.

M3: M2 plus (1) large-denomination time deposits (in amounts of $100,000 or more) issued by all depository institutions, (2) balances in institutional money funds, (3) RP liabilities (overnight and term) issued by all depository institutions, and (4) Eurodollars (overnight and term) held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Seasonally adjusted M3 is calculated by summing large time deposits, institutional money fund balances, RP liabilities, and Eurodollars, each seasonally adjusted separately, and adding this result to seasonally adjusted M2.

Debt: The debt aggregate is the outstanding credit market debt of the domestic nonfinancial sectors—the federal sector (U.S. government, not including government-sponsored enterprises or federally related mortgage pools) and the nonfederal sectors (state and local governments, households and nonprofit organizations, nonfinancial corporate and nonfarm noncorporate businesses, and farms). Nonfederal debt consists of mortgages, tax-exempt and corporate bonds, consumer credit, bank loans, commercial paper, and other loans. The data, which are derived from the Federal Reserve Board's flow of funds accounts, are break-adjusted (that is, discontinuities in the data have been smoothed into the series) and month-averaged (that is, the data have been derived by averaging adjacent month-end levels).

3. Currency outside the U.S. Treasury, Federal Reserve Banks, and vaults of depository institutions.

4. Outstanding amount of U.S. dollar-denominated travelers checks of nonbank issuers. Travelers checks issued by depository institutions are included in demand deposits.

5. Demand deposits at commercial banks and foreign-related institutions other than those owed to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float.

6. Consists of NOW and ATS account balances at all depository institutions, credit union share draft account balances, and demand deposits at thrift institutions.

7. Sum of (1) savings deposits (including MMDAs), (2) small time deposits, and (3) retail money fund balances.

8. Sum of (1) large time deposits, (2) institutional money fund balances, (3) RP liabilities (overnight and term) issued by depository institutions, and (4) Eurodollars (overnight and term) of U.S. addressees.

9. Small time deposits—including retail RPs—are those issued in amounts of less than $100,000. All IRAs and Keogh accounts at commercial banks and thrift institutions are subtracted from small time deposits.

10. Large time deposits are those issued in amounts of $100,000 or more, excluding those booked at international banking facilities.

11. Large time deposits at commercial banks less those held by money market funds, depository institutions, the U.S. government, and foreign banks and official institutions.

12. Includes both overnight and term.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]

A. All commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1999							1999			
	Oct.	Apr.	May	June	July[r]	Aug.[r]	Sept.[r]	Oct.	Oct. 6	Oct. 13	Oct. 20	Oct. 27
	Seasonally adjusted											
Assets												
1 Bank credit	4,490.4[r]	4,510.0[r]	4,519.3[r]	4,555.6[r]	4,553.0	4,588.1	4,619.2	4,625.8	4,629.3	4,613.5	4,621.0	4,639.2
2 Securities in bank credit	1,218.8[r]	1,195.9[r]	1,195.4[r]	1,213.7[r]	1,231.1	1,248.2	1,258.8	1,247.6	1,260.1	1,250.3	1,244.6	1,248.4
3 U.S. government securities	776.9[r]	801.8[r]	799.9[r]	812.9[r]	813.9	819.8	817.3	809.5	816.8	814.3	808.0	807.1
4 Other securities	441.9	394.1[r]	395.5[r]	400.8[r]	417.2	428.4	441.5	438.2	443.3	435.9	436.6	441.2
5 Loans and leases in bank credit[2]	3,271.6[r]	3,314.1[r]	3,323.9[r]	3,341.9[r]	3,321.9	3,339.9	3,360.5	3,378.2	3,369.1	3,363.2	3,376.4	3,390.8
6 Commercial and industrial	943.9[r]	961.7[r]	957.4[r]	963.5[r]	965.0	973.0	980.7	983.7	979.9	979.2	985.6	986.7
7 Real estate	1,301.2	1,351.0	1,360.3	1,365.9	1,367.4	1,379.7	1,396.7	1,421.0	1,415.0	1,420.4	1,422.0	1,423.0
8 Revolving home equity	102.4	103.0	104.3	103.7	97.9	98.5	106.4	115.1	114.6	115.2	115.3	115.2
9 Other	1,198.9[r]	1,247.9	1,256.0	1,262.2	1,269.4	1,281.2	1,290.3	1,305.9	1,300.4	1,305.3	1,306.7	1,307.8
10 Consumer	493.1	499.5	495.9	491.3	481.9	480.1	481.0	480.7	479.7	479.7	481.0	482.1
11 Security[3]	156.6[r]	122.1[r]	126.8[r]	131.0[r]	122.2	122.4	116.0	107.8	105.8	101.7	105.7	114.0
12 Other loans and leases	376.7[r]	379.9[r]	383.5[r]	390.2[r]	385.4	384.6	386.1	385.0	388.8	382.2	382.1	385.1
13 Interbank loans	219.2	217.4	227.5	224.5	224.0	214.9	207.8	218.6	214.2	212.2	217.8	228.4
14 Cash assets[4]	246.1	257.8	259.9	261.0	258.2	253.5	263.7	271.4	262.4	271.5	273.7	276.3
15 Other assets[5]	329.0	344.8	347.2	348.6	348.7	345.5	349.4	360.5	355.6	362.4	363.1	362.9
16 Total assets[6]	**5,226.7[r]**	**5,271.5[r]**	**5,295.1[r]**	**5,331.0[r]**	**5,325.7**	**5,343.4**	**5,381.0**	**5,416.9**	**5,402.4**	**5,400.2**	**5,416.2**	**5,447.2**
Liabilities												
17 Deposits	3,287.6	3,376.5	3,374.9	3,377.2	3,392.0	3,385.5	3,396.0	3,434.0	3,421.5	3,437.3	3,424.1	3,443.5
18 Transaction	673.0	656.6	649.6	655.7	649.3	637.2	635.3	631.8	618.9	631.3	631.2	653.1
19 Nontransaction	2,614.5	2,719.9	2,725.2	2,721.5	2,742.8	2,748.3	2,760.7	2,802.1	2,802.6	2,806.0	2,792.9	2,790.4
20 Large time	714.8	725.7	723.6	718.8	722.4	720.4	728.6	765.9	753.6	762.3	766.7	769.7
21 Other	1,899.8	1,994.2	2,001.7	2,002.7	2,020.4	2,027.9	2,032.1	2,036.2	2,049.0	2,043.6	2,026.2	2,020.7
22 Borrowings	983.4	983.7	997.8	1,020.5	1,018.8	1,025.8	1,038.1	1,041.0	1,033.4	1,032.5	1,048.2	1,045.9
23 From banks in the U.S.	315.5	311.8	324.3	338.4	339.2	338.5	342.6	352.6	355.3	347.3	350.6	351.9
24 From others	667.9	671.9	673.6	682.0	679.6	687.3	695.6	688.5	678.0	685.2	697.7	694.0
25 Net due to related foreign offices	221.0	210.2	203.9	215.1	212.5	222.4	218.3	220.6	235.9	218.5	218.5	210.7
26 Other liabilities	316.5	273.8	271.1	275.5	274.0	279.2	289.0	287.8	282.6	281.2	288.1	301.1
27 Total liabilities	**4,808.4**	**4,844.2**	**4,847.7**	**4,888.2**	**4,897.4**	**4,912.9**	**4,941.4**	**4,983.4**	**4,973.5**	**4,969.4**	**4,978.9**	**5,001.2**
28 Residual (assets less liabilities)[7]	418.3[r]	427.3[r]	447.5[r]	442.8[r]	428.3	430.5	439.6	433.5	428.9	430.8	437.3	446.0
	Not seasonally adjusted											
Assets												
29 Bank credit	4,495.4[r]	4,518.3[r]	4,522.0[r]	4,549.4[r]	4,537.0	4,567.0	4,609.4	4,630.3	4,628.0	4,615.5	4,623.9	4,641.3
30 Securities in bank credit	1,216.7[r]	1,204.6[r]	1,200.9[r]	1,210.4[r]	1,220.0	1,235.4	1,247.6	1,244.1	1,251.6	1,243.7	1,239.6	1,247.7
31 U.S. government securities	772.1[r]	811.8[r]	808.1[r]	812.4[r]	806.0	808.1	807.1	803.8	807.7	805.6	801.8	803.8
32 Other securities	444.5	392.9[r]	392.8[r]	398.0[r]	413.9	427.3	440.5	440.3	444.0	438.1	437.9	443.9
33 Loans and leases in bank credit[2]	3,278.7[r]	3,313.7[r]	3,321.1[r]	3,339.0[r]	3,317.0	3,331.7	3,361.8	3,386.2	3,376.4	3,371.8	3,384.2	3,393.6
34 Commercial and industrial	943.6[r]	968.4[r]	961.9[r]	963.8[r]	962.6	964.4	976.7	984.8	981.7	979.1	986.6	986.3
35 Real estate	1,304.7	1,347.6	1,359.7	1,366.5	1,368.4	1,382.3	1,400.4	1,424.7	1,418.7	1,425.2	1,424.9	1,425.6
36 Revolving home equity	103.2	102.4	103.9	103.3	97.7	98.7	107.2	116.0	115.3	116.0	116.2	116.1
37 Other	1,201.5	1,245.3[r]	1,255.8	1,263.2	1,270.6	1,283.6	1,293.2	1,308.7	1,303.4	1,309.3	1,308.7	1,309.5
38 Consumer	493.6	496.0	493.4	488.6	479.5	481.2	484.0	481.4	479.8	480.0	481.9	483.5
39 Security[3]	158.2[r]	124.0[r]	126.6[r]	130.4[r]	120.2	118.7	112.7	108.6	104.5	102.5	107.2	114.3
40 Other loans and leases	378.6[r]	377.7[r]	379.5[r]	389.8[r]	386.4	385.1	388.0	386.7	391.6	384.9	383.6	383.9
41 Interbank loans	217.0	222.4	223.3	221.8	217.7	207.1	204.2	215.1	211.9	208.0	211.1	221.2
42 Cash assets[4]	246.5	255.5	257.6	256.6	250.3	243.1	261.0	271.6	256.2	290.3	270.1	266.2
43 Other assets[5]	326.9	347.8	348.7	354.5	351.4	348.3	351.4	357.8	356.3	362.3	356.1	356.0
44 Total assets[6]	**5,228.0[r]**	**5,285.6[r]**	**5,292.9[r]**	**5,323.5[r]**	**5,298.2**	**5,306.7**	**5,366.7**	**5,415.6**	**5,393.3**	**5,416.8**	**5,402.1**	**5,425.4**
Liabilities												
45 Deposits	3,287.1	3,387.2	3,365.5	3,375.2	3,375.7	3,371.6	3,394.6	3,436.5	3,432.7	3,456.5	3,418.3	3,417.5
46 Transaction	662.9	664.2	640.6	650.8	638.5	620.9	629.5	623.6	615.9	637.6	617.2	623.7
47 Nontransaction	2,624.1	2,723.0	2,724.9	2,724.4	2,737.1	2,750.7	2,765.1	2,812.9	2,816.7	2,818.8	2,801.1	2,793.8
48 Large time	716.4	722.6	724.8	716.1	715.7	717.7	730.1	767.5	755.8	762.9	766.6	772.9
49 Other	1,907.7	2,000.3	2,000.1	2,008.3	2,021.5	2,033.0	2,035.0	2,045.4	2,060.9	2,055.9	2,034.5	2,020.9
50 Borrowings	985.6	983.5	1,006.0	1,024.1	1,009.5	1,002.3	1,033.0	1,043.7	1,025.0	1,029.9	1,053.4	1,056.1
51 From banks in the U.S.	313.6	312.4	325.2	338.3	334.6	331.3	338.8	350.2	349.8	343.5	348.3	351.2
52 From others	672.0	671.1	680.8	685.7	674.9	671.0	694.2	693.5	675.2	686.4	705.1	704.9
53 Net due to related foreign offices	223.5	203.1	210.1	209.3	204.7	217.4	214.3	222.3	222.4	218.0	221.1	228.7
54 Other liabilities	315.0	273.4	270.8	274.8	273.2	279.1	287.9	286.3	280.5	279.6	286.4	300.1
55 Total liabilities	**4,811.2**	**4,847.3**	**4,852.3**	**4,883.4**	**4,863.1**	**4,870.4**	**4,929.9**	**4,988.8**	**4,960.6**	**4,983.9**	**4,979.2**	**5,002.4**
56 Residual (assets less liabilities)[7]	416.8[r]	438.4[r]	440.6[r]	440.1[r]	435.1	436.3	436.8	426.8	432.7	433.0	422.9	423.0
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	134.1	93.2[r]	92.6[r]	92.6[r]	97.8	102.8	111.3	98.8	107.3	97.5	96.6	99.6
58 Revaluation losses on off-balance-sheet items[8]	131.2	95.0[r]	94.5[r]	94.7[r]	99.1	105.4	110.4	97.4	105.1	95.5	94.5	99.1

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]—Continued

B. Domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1999							1999			
	Oct.	Apr.	May	June	July[r]	Aug.[r]	Sept.[r]	Oct.	Oct. 6	Oct. 13	Oct. 20	Oct. 27
	Seasonally adjusted											
Assets												
1 Bank credit	3,871.4[r]	3,959.9[r]	3,979.5[r]	4,023.2[r]	4,032.5	4,064.5	4,100.7	4,108.0	4,110.4	4,097.6	4,104.1	4,119.7
2 Securities in bank credit	1,000.0	995.6[r]	999.5[r]	1,017.7[r]	1,041.5	1,058.3	1,069.6	1,061.0	1,071.1	1,063.9	1,059.2	1,060.5
3 U.S. government securities	695.6	712.3	712.7	724.5	728.0	735.8	735.7	729.7	734.9	734.6	729.7	726.6
4 Other securities	304.4	283.3[r]	286.7[r]	293.2[r]	313.6	322.5	334.0	331.3	336.1	329.3	329.5	333.9
5 Loans and leases in bank credit[2]	2,871.3[r]	2,964.4[r]	2,980.0[r]	3,005.5[r]	2,991.0	3,006.1	3,031.0	3,047.0	3,039.4	3,033.7	3,044.9	3,059.1
6 Commercial and industrial	720.8	752.4	755.5	766.8	772.3	777.6	783.5	784.7	781.6	780.2	785.5	787.7
7 Real estate	1,277.7	1,331.0	1,340.5	1,346.7	1,349.0	1,362.1	1,379.1	1,403.2	1,397.0	1,402.6	1,404.2	1,405.2
8 Revolving home equity	102.4	103.0	104.3	103.7	97.9	98.5	106.4	115.1	114.6	115.2	115.3	115.2
9 Other	1,175.3	1,228.0	1,236.2	1,243.0	1,251.1	1,263.6	1,272.7	1,288.1	1,282.4	1,287.5	1,288.9	1,290.0
10 Consumer	493.1	499.5	495.9	491.3	481.9	480.1	481.0	480.7	479.7	479.7	481.0	482.1
11 Security[3]	86.5	70.1	73.4	79.0	69.6	67.4	64.8	56.1	55.1	51.4	54.6	61.9
12 Other loans and leases	293.3[r]	311.3[r]	314.7[r]	321.7[r]	318.2	318.9	322.7	322.3	326.0	319.7	319.6	322.2
13 Interbank loans	193.6	192.0	200.9	200.0	196.5	189.2	184.9	195.6	192.3	191.0	196.4	202.2
14 Cash assets[4]	210.6	223.2	223.9	227.5	223.1	215.5	222.9	227.3	218.5	229.2	230.1	231.7
15 Other assets[5]	290.6	307.3	311.3	315.1	316.6	316.5	320.1	328.6	325.6	330.3	331.0	330.6
16 **Total assets**[6]	**4,508.5[r]**	**4,624.2[r]**	**4,657.1[r]**	**4,707.4[r]**	**4,710.9**	**4,727.3**	**4,769.7**	**4,800.5**	**4,788.1**	**4,789.1**	**4,802.4**	**4,824.8**
Liabilities												
17 Deposits	2,971.5	3,064.6	3,064.4	3,071.5	3,081.6	3,076.3	3,084.9	3,102.6	3,102.0	3,108.5	3,090.8	3,107.5
18 Transaction	657.7	646.5	639.1	644.8	638.3	626.2	624.4	620.4	607.6	619.8	619.3	641.7
19 Nontransaction	2,313.8	2,418.1	2,425.3	2,426.6	2,443.2	2,450.1	2,460.4	2,482.3	2,494.5	2,488.7	2,471.5	2,465.8
20 Large time	415.3	425.5	425.6	426.2	425.7	426.2	433.5	447.8	448.7	447.5	446.4	446.2
21 Other	1,898.5	1,992.6	1,999.7	2,000.5	2,017.6	2,023.9	2,026.9	2,034.4	2,045.8	2,041.2	2,025.1	2,019.6
22 Borrowings	767.6	811.6	825.1	839.6	846.5	853.6	869.2	871.5	866.6	864.5	878.5	875.7
23 From banks in the U.S.	284.7	290.8	302.9	311.9	314.7	314.9	317.3	329.8	332.0	327.4	327.9	329.4
24 From others	482.9	520.8	522.3	527.7	531.8	538.8	551.9	541.7	534.6	537.1	550.6	546.3
25 Net due to related foreign offices	115.3	115.4	118.7	145.6	145.2	150.5	152.2	166.2	169.2	166.1	167.5	160.4
26 Other liabilities	237.5	206.6	211.1	214.1	210.7	217.5	224.5	224.9	219.9	218.7	225.8	237.2
27 **Total liabilities**	**4,091.9**	**4,198.2**	**4,219.4**	**4,270.7**	**4,283.9**	**4,297.9**	**4,330.8**	**4,365.2**	**4,357.7**	**4,357.8**	**4,362.5**	**4,380.8**
28 Residual (assets less liabilities)[7]	416.6[r]	425.9[r]	437.8[r]	436.7[r]	427.0	429.3	439.0	435.3	430.4	431.3	439.9	444.0
	Not seasonally adjusted											
Assets												
29 Bank credit	3,872.2[r]	3,971.0[r]	3,987.4[r]	4,020.1[r]	4,019.7	4,047.1	4,091.7	4,108.6	4,107.3	4,096.2	4,103.5	4,117.6
30 Securities in bank credit	994.8	1,005.8[r]	1,006.6[r]	1,015.3[r]	1,032.0	1,046.7	1,059.2	1,054.8	1,062.6	1,054.6	1,052.0	1,056.0
31 U.S. government securities	691.0	722.6	720.1	723.6	720.6	725.0	726.4	724.1	727.0	726.3	723.4	722.8
32 Other securities	303.9	283.2[r]	286.5[r]	291.7[r]	311.4	321.7	332.7	330.7	335.6	328.3	328.6	333.3
33 Loans and leases in bank credit[2]	2,877.4[r]	2,965.2[r]	2,980.8[r]	3,004.8[r]	2,987.7	3,000.4	3,032.6	3,053.7	3,044.7	3,041.5	3,051.5	3,061.6
34 Commercial and industrial	719.5	760.6	762.6	768.8	770.7	770.6	779.9	784.7	782.1	779.8	785.8	786.3
35 Real estate	1,281.0	1,327.9	1,340.1	1,347.5	1,350.2	1,364.9	1,382.8	1,406.7	1,400.6	1,407.3	1,407.0	1,407.7
36 Revolving home equity	103.2	102.4	103.9	103.3	97.7	98.7	107.2	116.0	115.3	116.0	116.2	116.1
37 Other	1,177.7	1,225.5	1,236.3	1,244.2	1,252.4	1,266.1	1,275.6	1,290.8	1,285.3	1,291.3	1,290.8	1,291.5
38 Consumer	493.6	496.0	493.4	488.6	479.5	481.2	484.0	481.4	479.8	480.0	481.9	483.5
39 Security[3]	88.3	72.1	73.5	78.2	67.9	63.7	61.3	57.2	53.8	52.1	56.5	63.3
40 Other loans and leases	295.0[r]	308.7[r]	311.1[r]	321.8[r]	319.4	320.1	324.7	323.7	328.5	322.3	320.4	320.9
41 Interbank loans	191.5	197.0	196.7	197.3	190.2	181.4	181.4	192.1	190.1	186.8	189.7	195.0
42 Cash assets[4]	210.6	222.0	222.0	222.2	215.4	205.5	220.4	226.9	212.3	247.6	225.7	220.5
43 Other assets[5]	288.6	312.0	313.5	322.1	320.0	318.7	321.8	326.1	326.3	330.1	324.2	324.2
44 **Total assets**[6]	**4,505.3[r]**	**4,644.0[r]**	**4,661.2[r]**	**4,703.2[r]**	**4,687.4**	**4,694.1**	**4,756.2**	**4,794.8**	**4,777.1**	**4,801.8**	**4,784.3**	**4,798.3**
Liabilities												
45 Deposits	2,970.6	3,075.9	3,052.7	3,068.8	3,067.7	3,065.0	3,083.9	3,105.1	3,112.2	3,128.4	3,085.8	3,080.2
46 Transaction	647.6	654.3	630.3	640.1	627.7	610.0	618.1	612.2	604.7	626.1	605.2	612.4
47 Nontransaction	2,323.0	2,421.6	2,422.4	2,428.6	2,440.0	2,455.0	2,465.8	2,493.0	2,507.5	2,502.4	2,480.5	2,467.8
48 Large time	417.1	423.4	424.5	422.6	420.8	424.3	433.1	449.9	448.9	448.7	448.2	449.2
49 Other	1,905.9	1,998.2	1,997.9	2,006.0	2,019.2	2,030.7	2,032.7	2,043.1	2,058.7	2,053.7	2,032.3	2,018.7
50 Borrowings	769.8	811.4	833.3	843.1	837.2	830.2	864.1	874.2	858.2	861.9	883.6	885.9
51 From banks in the U.S.	282.8	291.4	303.8	311.7	310.0	307.7	313.6	327.4	326.4	323.6	325.7	328.7
52 From others	487.0	519.9	529.5	531.4	527.1	522.5	550.6	546.7	531.9	538.3	558.0	557.2
53 Net due to related foreign offices	115.5	114.0	126.7	141.2	139.9	147.5	149.8	166.1	157.4	163.3	168.7	173.3
54 Other liabilities	236.8	207.3	211.3	213.9	210.7	217.3	223.8	224.1	218.7	217.9	224.9	236.4
55 **Total liabilities**	**4,092.7**	**4,208.6**	**4,224.1**	**4,267.0**	**4,255.5**	**4,259.9**	**4,321.6**	**4,369.5**	**4,346.6**	**4,371.5**	**4,363.0**	**4,375.7**
56 Residual (assets less liabilities)[7]	412.6[r]	435.5[r]	437.1[r]	436.3[r]	431.9	434.2	434.5	425.3	430.5	430.3	421.2	422.6
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	82.2	55.0[r]	57.3[r]	57.7[r]	60.5	64.7	73.0	62.9	71.6	61.2	60.9	63.6
58 Revaluation losses on off-balance-sheet items[8]	83.6	56.4[r]	59.6[r]	60.5[r]	62.8	69.1	73.1	62.2	70.5	60.2	59.7	63.1
59 Mortgage-backed securities[9]	335.9	335.7	335.5	334.3[r]	340.3	344.4	347.5	346.6	348.8	348.4	344.3	345.6

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]—Continued

C. Large domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1999r							1999			
	Oct.	Apr.	May	June	July	Aug.	Sept.	Oct.	Oct. 6	Oct. 13	Oct. 20	Oct. 27
	Seasonally adjusted											
Assets												
1 Bank credit	2,428.9r	2,430.6	2,438.8	2,466.5	2,461.2	2,479.2	2,501.2	2,487.2	2,491.8	2,478.1	2,482.9	2,496.5
2 Securities in bank credit	584.4r	551.5	551.3	562.0	581.9	596.6	606.2	595.4	603.7	597.2	593.6	595.7
3 U.S. government securities	380.0r	379.7	377.8	384.1	384.2	391.8	390.1	383.5	386.4	386.9	384.0	381.5
4 Trading account	21.0	25.9	22.3	25.1	22.7	23.3	20.9	20.0	20.6	19.3	20.8	19.9
5 Investment account	359.1r	353.8	355.5	359.0	361.5	368.6	369.2	363.5	365.8	367.6	363.2	361.6
6 Other securities	204.4	171.8	173.5	178.0	197.7	204.7	216.1	211.9	217.3	210.3	209.5	214.2
7 Trading account	112.7	72.8	75.0	74.2	79.7	83.7	90.9	83.8	90.5	82.8	81.9	84.5
8 Investment account	91.7	99.0	98.6	103.8	118.0	121.0	125.2	128.2	126.9	127.5	127.7	129.8
9 State and local government	23.9	24.6	24.8	25.3	25.4	25.7	25.7	25.7	25.6	25.6	25.4	25.4
10 Other	67.8	74.4	73.8	78.5	92.6	95.3	99.5	102.5	101.2	101.9	102.3	104.3
11 Loans and leases in bank credit[2]	1,844.5r	1,879.1	1,887.5	1,904.5	1,879.3	1,882.6	1,895.0	1,891.8	1,888.1	1,881.0	1,889.4	1,900.7
12 Commercial and industrial	532.3	552.8	553.0	561.4	564.1	567.6	570.7	566.1	564.0	562.2	567.0	568.7
13 Bankers acceptances	1.3	1.1	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.1	1.1	1.1
14 Other	531.0r	551.7	552.0	560.4	563.2	566.6	569.5	564.9	562.8	561.0	565.9	567.6
15 Real estate	708.7r	719.0	722.5	721.9	716.8	721.8	733.2	745.7	742.2	746.4	746.7	745.7
16 Revolving home equity	74.2	74.2	75.1	74.1	68.2	68.7	76.6	84.8	84.4	84.7	85.2	84.9
17 Other	634.5r	644.8	647.4	647.8	648.6	653.0	656.6	660.9	657.8	661.7	661.6	660.8
18 Consumer	301.0r	300.6	297.7	292.8	284.1	280.9	278.9	277.0	276.0	276.2	276.8	277.8
19 Security[3]	80.4	64.6	68.3	73.8	64.3	62.2	59.4	50.8	49.8	46.1	49.4	56.7
20 Federal funds sold to and repurchase agreements with broker–dealers	63.6	47.9	51.4	55.6	46.9	45.3	42.1	34.0	32.0	29.5	31.8	41.1
21 Other	16.7	16.7	16.8	18.2	17.4	16.9	17.3	16.8	17.8	16.6	17.7	15.6
22 State and local government	11.4	11.4	11.4	11.4	11.7	11.9	11.9	12.0	12.0	12.0	12.0	11.9
23 Agricultural	8.9	8.9	8.6	8.6	8.5	8.8	8.8	8.9	8.8	8.8	8.9	9.0
24 Federal funds sold to and repurchase agreements with others	13.4	11.8	10.7	15.5	4.2	7.7	11.0	9.7	10.9	10.3	10.0	7.3
25 All other loans	87.0r	92.3	96.0	99.0	103.9	98.7	96.5	94.1	94.6	92.6	92.5	96.0
26 Lease-financing receivables	101.5	117.9	119.3	120.0	121.7	123.1	124.6	127.4	129.7	126.3	126.0	127.7
27 Interbank loans	123.3r	131.7	143.3	144.7	139.6	134.6	132.7	145.9	143.3	142.3	147.8	151.7
28 Federal funds sold to and repurchase agreements with commercial banks	77.2	81.1	88.1	87.1	89.5	85.9	83.3	90.6	89.3	88.3	92.3	95.8
29 Other	46.1	50.6	55.2	57.6	50.1	48.7	49.4	55.3	54.0	54.1	55.6	55.9
30 Cash assets[4]	144.4	155.3	153.0	156.2	150.5	143.2	149.8	154.3	148.1	155.4	158.4	156.4
31 Other assets[5]	228.8r	234.7	237.3	240.6	238.5	236.0	239.4	243.7	242.2	246.5	243.2	245.5
32 **Total assets**[6]	**2,887.1r**	**2,913.9**	**2,933.9**	**2,969.4**	**2,951.7**	**2,954.7**	**2,984.5**	**2,992.6**	**2,987.1**	**2,983.9**	**2,993.9**	**3,011.3**
Liabilities												
33 Deposits	1,677.2r	1,700.0	1,694.7	1,694.9	1,693.0	1,680.0	1,685.9	1,685.7	1,691.4	1,693.2	1,677.2	1,684.8
34 Transaction	376.7r	364.5	355.5	357.3	351.3	337.8	338.7	334.7	328.5	336.2	333.9	345.9
35 Nontransaction	1,300.5r	1,335.5	1,339.1	1,337.6	1,341.7	1,342.2	1,347.2	1,351.0	1,362.9	1,357.0	1,343.3	1,338.8
36 Large time	227.1r	229.0	226.0	227.9	229.4	227.0	232.7	242.6	244.5	242.9	241.5	240.6
37 Other	1,073.4r	1,106.5	1,113.1	1,109.6	1,112.3	1,115.2	1,114.5	1,108.4	1,118.4	1,114.1	1,101.8	1,098.2
38 Borrowings	600.6	625.9	633.6	643.4	639.5	645.1	655.2	657.1	652.8	649.6	660.8	663.3
39 From banks in the U.S.	205.4	207.1	215.6	220.7	217.5	219.1	221.1	237.0	239.0	234.2	233.2	238.5
40 From others	395.3	418.8	418.0	422.7	422.1	426.0	434.1	420.0	413.8	415.4	427.6	424.8
41 Net due to related foreign offices	110.6	110.5	113.6	141.5	140.9	147.0	148.8	161.9	165.1	161.6	163.4	156.0
42 Other liabilities	209.0	176.3	180.0	182.0	179.4	184.4	190.3	190.5	185.2	184.4	191.5	202.4
43 **Total liabilities**	**2,597.4r**	**2,612.6**	**2,621.9**	**2,661.8**	**2,652.8**	**2,656.5**	**2,680.2**	**2,695.2**	**2,694.4**	**2,688.7**	**2,693.0**	**2,706.4**
44 Residual (assets less liabilities)[7]	289.6r	301.3	311.9	307.7	298.9	298.2	304.3	297.4	292.7	295.1	300.9	304.9

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]—Continued

C. Large domestically chartered commercial banks—Continued

Account	Monthly averages								Wednesday figures			
	1998	1999[r]							1999			
	Oct.	Apr.	May	June	July	Aug.	Sept.	Oct.	Oct. 6	Oct. 13	Oct. 20	Oct. 27
	Not seasonally adjusted											
Assets												
45 Bank credit	2,430.7[r]	2,436.7	2,436.6	2,456.4	2,447.2	2,459.7	2,489.0	2,489.0	2,491.4	2,477.2	2,483.2	2,494.8
46 Securities in bank credit	582.0[r]	556.8	553.1	557.8	574.1	586.5	598.1	592.3	599.3	590.8	589.4	593.6
47 U.S. government securities	378.1[r]	385.8	380.7	381.3	378.4	382.8	382.7	380.9	382.0	381.4	380.6	380.2
48 Trading account	21.9	25.2	20.8	23.5	20.9	22.2	20.7	20.8	20.9	19.8	22.0	20.4
49 Investment account	356.1[r]	360.5	359.9	357.8	357.5	360.7	361.9	360.1	361.1	361.6	358.6	359.8
50 Mortgage-backed securities	259.4[r]	242.5	239.4	235.1	233.8	237.5	240.6	238.2	239.8	239.5	236.1	237.5
51 Other	96.7[r]	118.0	120.5	122.7	123.6	123.2	121.4	121.8	121.3	122.1	122.4	122.3
52 One year or less	26.9	25.0	24.3	25.3	25.3	24.9	24.5	25.3	25.4	25.1	25.6	25.5
53 One to five years	38.3[r]	54.2	55.9	57.7	58.8	59.0	58.2	59.0	58.3	59.3	59.4	59.3
54 More than five years	31.5	38.9	40.3	39.8	39.5	39.3	38.6	37.5	37.7	37.6	37.4	37.4
55 Other securities	204.0	171.0	172.5	176.5	195.7	203.7	215.4	211.5	217.3	209.5	208.8	213.4
56 Trading account	112.7	72.8	75.0	74.2	79.7	83.7	90.9	83.8	90.5	82.8	81.9	84.5
57 Investment account	91.3	98.2	97.5	102.3	116.0	120.0	124.5	127.7	126.8	126.7	126.9	128.9
58 State and local government	24.0	24.7	24.9	25.1	25.0	25.4	25.6	25.8	25.6	25.6	25.5	25.6
59 Other	67.4	73.5	72.6	77.2	91.1	94.6	98.9	101.9	101.2	101.1	101.4	103.3
60 Loans and leases in bank credit[2]	1,848.6[r]	1,879.9	1,883.5	1,898.6	1,873.0	1,873.2	1,891.0	1,896.6	1,892.1	1,886.3	1,893.8	1,901.2
61 Commercial and industrial	532.5[r]	558.9	557.5	561.5	562.7	561.9	568.2	567.5	566.1	563.2	568.6	568.8
62 Bankers acceptances	1.3	1.1	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.1	1.1	1.1
63 Other	531.1	557.8	556.5	560.5	561.7	560.8	567.1	566.4	565.0	562.1	567.5	567.7
64 Real estate	710.5[r]	716.1	719.8	719.9	715.9	722.3	733.5	747.8	744.5	749.3	748.1	746.6
65 Revolving home equity	74.8	73.7	74.7	73.9	68.2	69.1	77.2	85.5	84.9	85.3	85.9	85.6
66 Other	395.3[r]	390.7	392.5	393.2	394.3	398.7	400.2	404.1	402.6	406.3	404.0	402.1
67 Commercial	240.4[r]	251.7	252.6	252.8	253.4	254.6	256.2	258.2	257.1	257.7	258.3	258.9
68 Consumer	300.9[r]	298.2	295.5	290.9	282.3	281.5	280.8	277.1	276.2	276.1	276.7	277.9
69 Security[3]	82.2	66.5	68.4	73.0	62.7	58.4	55.9	51.9	48.4	46.9	51.3	58.1
70 Federal funds sold to and repurchase agreements with broker–dealers	65.5	49.8	51.2	54.1	45.3	41.8	38.8	35.1	31.4	30.3	33.4	42.0
71 Other	16.7	16.7	17.2	18.9	17.4	16.6	17.1	16.8	17.0	16.6	17.9	16.1
72 State and local government	11.4	11.3	11.3	11.3	11.6	11.9	12.0	12.0	12.1	12.1	12.0	11.9
73 Agricultural	9.0	8.7	8.6	8.7	8.8	9.0	9.0	9.0	9.0	9.0	9.0	9.0
74 Federal funds sold to and repurchase agreements with others	13.4	11.8	10.7	15.5	4.2	7.7	11.0	9.7	10.9	10.3	10.0	7.3
75 All other loans	87.9[r]	90.4	92.6	97.5	103.6	97.9	97.1	95.0	95.5	93.9	93.0	95.2
76 Lease-financing receivables	100.8	118.1	119.2	120.2	121.3	122.5	123.4	126.5	129.3	125.6	124.9	126.3
77 Interbank loans	119.7[r]	135.8	143.4	145.1	137.5	129.4	130.3	141.3	139.0	137.2	141.1	146.0
78 Federal funds sold to and repurchase agreements with commercial banks	74.2	83.8	87.2	86.3	85.9	80.9	81.3	86.8	85.2	83.3	86.2	91.6
79 Other	45.4	52.0	56.3	58.8	51.5	48.4	49.0	54.5	53.8	53.9	55.0	54.4
80 Cash assets[4]	145.1	154.2	151.5	152.0	144.7	136.4	148.6	154.8	143.0	170.4	155.9	149.6
81 Other assets[5]	226.7	239.1	239.6	246.0	240.7	237.5	240.6	241.2	241.5	244.7	238.6	241.2
82 **Total assets**[6]	**2,883.8[r]**	**2,927.5**	**2,932.5**	**2,960.7**	**2,931.8**	**2,924.4**	**2,969.8**	**2,987.8**	**2,976.3**	**2,991.0**	**2,980.5**	**2,993.2**
Liabilities												
83 Deposits	1,673.7[r]	1,706.1	1,680.3	1,688.8	1,681.7	1,670.0	1,681.9	1,684.3	1,694.6	1,703.4	1,671.4	1,664.3
84 Transaction	369.7[r]	368.6	349.1	353.7	344.6	328.5	335.3	329.5	324.9	340.9	325.4	328.2
85 Nontransaction	1,304.0[r]	1,337.5	1,331.2	1,335.1	1,337.1	1,341.6	1,346.6	1,354.8	1,369.6	1,362.5	1,346.0	1,336.1
86 Large time	228.9[r]	226.9	224.8	224.4	224.6	225.2	232.2	244.6	244.7	244.1	243.3	243.5
87 Other	1,075.1[r]	1,110.6	1,106.3	1,110.7	1,112.6	1,116.4	1,114.3	1,110.2	1,124.9	1,118.4	1,102.7	1,092.6
88 Borrowings	600.5	628.3	641.4	645.8	630.4	621.6	647.5	656.9	644.6	645.6	662.1	667.3
89 From banks in the U.S.	201.7	209.4	216.7	220.3	213.7	212.6	217.0	232.7	233.0	229.3	228.5	234.1
90 From nonbanks in the U.S.	398.7	418.9	424.7	425.5	416.7	409.0	430.5	424.2	411.5	416.4	433.6	433.1
91 Net due to related foreign offices	110.9	109.0	121.7	137.1	135.7	144.0	146.4	161.8	153.2	158.7	164.7	168.8
92 Other liabilities	209.0	176.3	180.0	182.0	179.4	184.4	190.3	190.5	185.2	184.4	191.5	202.4
93 **Total liabilities**	**2,594.0[r]**	**2,619.7**	**2,623.4**	**2,653.7**	**2,627.2**	**2,620.1**	**2,666.0**	**2,693.6**	**2,677.6**	**2,692.2**	**2,689.7**	**2,702.7**
94 Residual (assets less liabilities)[7]	289.9[r]	307.8	309.1	307.0	304.6	304.3	303.7	294.2	298.8	298.9	290.8	290.5
MEMO												
95 Revaluation gains on off-balance-sheet items[8]	82.2	55.0	57.3	57.7	60.5	64.7	73.0	62.9	71.6	61.2	60.9	63.6
96 Revaluation losses on off-balance-sheet items[8]	83.6	56.4	59.6	60.5	62.8	69.1	73.1	62.2	70.5	60.2	59.7	63.1
97 Mortgage-backed securities[9]	284.5[r]	270.8	266.8	264.4	269.9	274.3	276.9	273.8	275.5	275.1	271.7	273.0
98 Pass-through securities	193.0[r]	180.7	177.9	176.8	183.6	187.3	186.3	184.0	185.8	185.0	182.2	183.6
99 CMOs, REMICs, and other mortgage-backed securities	91.5[r]	90.1	88.8	87.6	86.3	87.1	90.7	89.7	89.7	90.1	89.5	89.4
100 Net unrealized gains (losses) on available-for-sale securities[10]	4.4	.9	.6	.0	−3.3	−4.2	−4.9	−5.6	−5.4	−5.7	−5.7	−5.4
101 Offshore credit to U.S. residents[11]	38.5	37.9	37.7	37.0	36.3	32.2	27.8	26.7	27.6	27.6	27.1	25.8

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]—Continued

D. Small domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1999[r]							1999			
	Oct.[r]	Apr.	May	June	July	Aug.	Sept.	Oct.	Oct. 6	Oct. 13	Oct. 20	Oct. 27
	Seasonally adjusted											
Assets												
1 Bank credit	1,442.5	1,529.3	1,540.7	1,556.7	1,571.3	1,585.3	1,599.5	1,620.8	1,618.7	1,619.5	1,621.1	1,623.2
2 Securities in bank credit	415.7	444.1	448.1	455.7	459.6	461.8	463.5	465.6	467.4	466.7	465.7	464.8
3 U.S. government securities	315.6	332.6	334.9	340.4	343.8	344.0	345.6	346.2	348.6	347.7	345.7	345.1
4 Other securities	100.0	111.5	113.2	115.2	115.8	117.8	117.8	119.4	118.8	119.1	120.0	119.7
5 Loans and leases in bank credit[2]	1,026.8	1,085.2	1,092.6	1,101.0	1,111.7	1,123.5	1,136.0	1,155.2	1,151.3	1,152.8	1,155.5	1,158.4
6 Commercial and industrial	188.4	199.6	202.5	205.4	208.2	210.0	212.8	218.6	217.6	218.1	218.5	219.0
7 Real estate	569.0	612.0	618.0	624.8	632.2	640.4	645.9	657.5	654.8	656.2	657.5	659.5
8 Revolving home equity	28.2	28.8	29.2	29.5	29.8	29.8	29.8	30.3	30.2	30.4	30.2	30.2
9 Other	540.8	583.2	588.8	595.2	602.4	610.6	616.1	627.2	624.6	625.8	627.3	629.3
10 Consumer	192.1	198.9	198.2	198.5	197.8	199.2	202.1	203.7	203.6	203.6	204.2	204.3
11 Security[3]	6.1	5.5	5.2	5.2	5.3	5.3	5.3	5.3	5.3	5.2	5.2	5.2
12 Other loans and leases	71.1	69.1	68.7	67.2	68.2	68.7	69.9	70.1	69.9	69.7	70.2	70.3
13 Interbank loans	70.3	60.3	57.6	55.3	56.9	54.6	52.2	49.7	49.0	48.7	48.5	50.5
14 Cash assets[4]	66.2	67.8	70.9	71.4	72.6	72.3	73.1	72.9	70.3	73.8	71.7	75.3
15 Other assets[5]	61.7	72.6	74.0	74.6	78.1	80.5	80.7	84.9	83.4	83.8	87.7	85.1
16 **Total assets**[6]	**1,621.4**	**1,710.2**	**1,723.3**	**1,738.0**	**1,759.1**	**1,772.6**	**1,785.3**	**1,807.9**	**1,801.0**	**1,805.3**	**1,808.5**	**1,813.5**
Liabilities												
17 Deposits	1,294.3	1,364.6	1,369.8	1,376.6	1,388.5	1,396.3	1,399.0	1,416.9	1,410.6	1,415.2	1,413.6	1,422.7
18 Transaction	280.9	282.0	283.6	287.5	287.0	288.4	285.7	285.7	279.1	283.6	285.4	295.8
19 Nontransaction	1,013.3	1,082.6	1,086.2	1,089.1	1,101.5	1,107.9	1,113.3	1,131.3	1,131.6	1,131.7	1,128.2	1,127.0
20 Large time	188.2	196.5	199.6	198.2	196.2	199.1	200.8	205.3	204.1	204.6	204.9	205.6
21 Other	825.1	886.1	886.6	890.9	905.3	908.8	912.4	926.0	927.4	927.0	923.3	921.4
22 Borrowings	167.0	185.7	191.5	196.1	206.9	208.6	214.0	214.4	213.9	215.0	217.6	212.4
23 From banks in the U.S.	79.4	83.7	87.3	91.2	97.2	95.8	96.1	92.7	93.0	93.2	94.7	90.9
24 From others	87.6	102.0	104.2	104.9	109.8	112.8	117.9	121.6	120.9	121.8	123.0	121.5
25 Net due to related foreign offices	4.7	4.9	5.0	4.1	4.3	3.5	3.4	4.3	4.2	4.6	4.1	4.5
26 Other liabilities	28.6	30.4	31.1	32.1	31.3	33.1	34.2	34.4	34.7	34.3	34.2	34.9
27 **Total liabilities**	**1,494.4**	**1,585.6**	**1,597.5**	**1,608.9**	**1,631.1**	**1,641.4**	**1,650.6**	**1,670.0**	**1,663.3**	**1,669.1**	**1,669.5**	**1,674.4**
28 Residual (assets less liabilities)[7]	126.9	124.6	125.8	129.0	128.1	131.2	134.7	137.9	137.6	136.2	139.0	139.0
	Not seasonally adjusted											
Assets												
29 Bank credit	1,441.6	1,534.4	1,550.8	1,563.8	1,572.6	1,587.5	1,602.7	1,619.6	1,615.9	1,619.0	1,620.4	1,622.8
30 Securities in bank credit	412.8	449.0	453.5	457.5	457.9	460.2	461.1	462.5	463.3	463.8	462.6	462.4
31 U.S. government securities	312.9	336.8	339.4	342.3	342.2	342.2	343.8	343.3	345.0	345.0	342.8	342.6
32 Other securities	99.9	112.2	114.0	115.2	115.6	118.0	117.3	119.2	118.3	118.8	119.8	119.9
33 Loans and leases in bank credit[2]	1,028.8	1,085.4	1,097.3	1,106.3	1,114.7	1,127.3	1,141.6	1,157.1	1,152.6	1,155.2	1,157.8	1,160.4
34 Commercial and industrial	187.1	201.7	205.2	207.3	208.0	208.7	211.7	217.2	216.0	216.6	217.2	217.4
35 Real estate	570.5	611.8	620.4	627.6	634.3	642.5	649.3	658.9	656.0	658.0	658.9	661.1
36 Revolving home equity	28.4	28.7	29.1	29.4	29.5	29.7	30.0	30.5	30.4	30.6	30.4	30.5
37 Other	542.0	583.1	591.2	598.2	604.8	612.8	619.3	628.5	625.6	627.4	628.5	630.6
38 Consumer	192.7	197.8	197.9	197.7	197.3	199.7	203.2	204.3	203.6	204.0	205.2	205.5
39 Security[3]	6.1	5.5	5.2	5.2	5.3	5.3	5.3	5.3	5.3	5.2	5.2	5.2
40 Other loans and leases	72.4	68.5	68.7	68.5	69.8	71.0	72.1	71.4	71.7	71.4	71.4	71.1
41 Interbank loans	71.8	61.2	53.3	52.2	52.8	52.0	51.1	50.8	51.2	49.6	48.6	49.0
42 Cash assets[4]	65.5	67.8	70.5	70.3	70.7	69.1	71.8	72.1	69.3	77.2	69.7	70.9
43 Other assets[5]	61.9	73.0	74.0	76.2	79.3	81.2	81.1	85.0	84.8	85.5	85.7	82.9
44 **Total assets**[6]	**1,621.5**	**1,716.6**	**1,728.7**	**1,742.5**	**1,755.7**	**1,769.7**	**1,786.4**	**1,807.0**	**1,800.7**	**1,810.7**	**1,803.8**	**1,805.1**
Liabilities												
45 Deposits	1,296.9	1,369.8	1,372.4	1,380.0	1,386.0	1,394.9	1,402.1	1,420.8	1,417.6	1,425.0	1,414.4	1,415.9
46 Transaction	277.9	285.7	281.2	286.5	283.1	281.5	282.8	282.6	279.7	285.1	279.9	284.2
47 Nontransaction	1,019.0	1,084.1	1,091.2	1,093.5	1,102.9	1,113.4	1,119.3	1,138.2	1,137.9	1,139.9	1,134.5	1,131.7
48 Large time	188.2	196.5	199.6	198.2	196.2	199.1	200.8	205.3	204.1	204.6	204.9	205.6
49 Other	830.7	887.6	891.6	895.3	906.6	914.3	918.4	932.9	933.7	935.3	929.6	926.1
50 Borrowings	169.4	183.1	191.9	197.3	206.7	208.6	216.6	217.3	213.7	216.3	221.5	218.6
51 From banks in the U.S.	81.1	82.0	87.1	91.4	96.3	95.1	96.6	94.7	93.3	94.3	97.2	94.5
52 From others	88.3	101.1	104.8	105.9	110.4	113.5	120.0	122.6	120.3	121.9	124.3	124.1
53 Net due to related foreign offices	4.7	4.9	5.0	4.1	4.3	3.5	3.4	4.3	4.2	4.6	4.1	4.5
54 Other liabilities	27.8	31.1	31.3	31.9	31.4	32.9	33.5	33.5	33.6	33.5	33.4	34.0
55 **Total liabilities**	**1,498.7**	**1,588.9**	**1,600.6**	**1,613.3**	**1,628.3**	**1,639.8**	**1,655.6**	**1,675.9**	**1,669.0**	**1,679.3**	**1,673.3**	**1,673.0**
56 Residual (assets less liabilities)[7]	122.7	127.7	128.0	129.3	127.3	129.9	130.8	131.1	131.7	131.4	130.4	132.1
MEMO												
57 Mortgage-backed securities[9]	51.4	64.9	68.7	69.9	70.4	70.1	70.6	72.8	73.3	73.3	72.6	72.5

Footnotes appear on p. A21.

1.26 COMMERCIAL BANKS IN THE UNITED STATES Assets and Liabilities[1]—Continued

E. Foreign-related institutions

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1999							1999			
	Oct.	Apr.	May	June	July[r]	Aug.[r]	Sept.[r]	Oct.	Oct. 6	Oct. 13	Oct. 20	Oct. 27
	Seasonally adjusted											
Assets												
1 Bank credit	619.0[r]	550.1[r]	539.8[r]	532.4[r]	520.5	523.6	518.6	517.8	518.8	515.8	516.9	519.5
2 Securities in bank credit	218.8[r]	200.4[r]	196.0[r]	196.0[r]	189.6	189.9	189.1	186.6	189.0	186.3	185.4	187.8
3 U.S. government securities	81.2[r]	89.5[r]	87.2[r]	88.4[r]	85.9	84.0	81.6	79.8	81.8	79.7	78.3	80.6
4 Other securities	137.5	110.9	108.7	107.6	103.7	105.9	107.5	106.9	107.2	106.6	107.1	107.3
5 Loans and leases in bank credit[2]	400.2[r]	349.7	343.9[r]	336.4[r]	330.9	333.7	329.4	331.2	329.8	329.5	331.5	331.7
6 Commercial and industrial	223.1[r]	209.3[r]	201.9[r]	196.7[r]	192.7	195.5	197.2	199.0	198.3	198.9	200.1	198.9
7 Real estate	23.5	20.0[r]	19.8	19.2	18.4	17.6	17.6	17.8	18.0	17.8	17.8	17.8
8 Security[3]	70.1	51.9[r]	53.3[r]	52.0[r]	52.6	54.9	51.3	51.6	50.7	50.4	51.1	52.0
9 Other loans and leases	83.4[r]	68.6[r]	68.8[r]	68.5[r]	67.2	65.8	63.4	62.8	62.8	62.4	62.6	63.0
10 Interbank loans	25.6	25.4	26.6	24.5	27.4	25.7	22.9	22.9	21.8	21.2	21.4	26.2
11 Cash assets[4]	35.5	34.6	35.9	33.5	35.0	38.0	40.8	44.1	43.9	42.3	43.6	44.6
12 Other assets[5]	38.5	37.5	35.9	33.4	32.1	29.0	29.3	31.8	30.0	32.1	32.1	32.3
13 **Total assets**[6]	**718.3**[r]	**647.3**[r]	**638.0**[r]	**623.6**[r]	**614.8**	**616.1**	**611.3**	**616.4**	**614.3**	**611.1**	**613.7**	**622.4**
Liabilities												
14 Deposits	316.1	311.9	310.4	305.7	310.5	309.2	311.1	331.3	319.5	328.8	333.3	336.0
15 Transaction	15.4	10.1	10.5	10.9	10.9	11.0	10.9	11.5	11.4	11.6	11.9	11.4
16 Nontransaction	300.7	301.8	299.9	294.8	299.5	298.2	300.3	319.8	308.2	317.3	321.4	324.6
17 Borrowings	215.8	172.1	172.7	180.9	172.3	172.1	168.9	169.6	166.8	168.0	169.7	170.2
18 From banks in the U.S.	30.8	21.0	21.4	26.6	24.5	23.6	25.3	22.8	23.4	19.9	22.7	22.5
19 From others	185.0	151.1	151.3	154.4	147.8	148.6	143.7	146.8	143.4	148.1	147.1	147.7
20 Net due to related foreign offices	105.7	94.8	85.2	69.4	67.3	72.0	66.1	54.4	66.7	52.3	51.0	50.3
21 Other liabilities	79.0	67.2	59.9	61.4	63.4	61.7	64.5	62.8	62.8	62.5	62.3	63.8
22 **Total liabilities**	**716.5**	**645.9**	**628.3**	**617.5**	**613.5**	**615.0**	**610.7**	**618.2**	**615.8**	**611.6**	**616.4**	**620.4**
23 Residual (assets less liabilities)[7]	1.7[r]	1.4[r]	9.7[r]	6.1[r]	1.3	1.1	.6	−1.8	−1.4	−.5	−2.6	2.0
	Not seasonally adjusted											
Assets												
24 Bank credit	623.2[r]	547.2[r]	534.6[r]	529.3[r]	517.3	519.9	517.7	521.8	520.7	519.3	520.4	523.7
25 Securities in bank credit	221.9[r]	198.8[r]	194.3[r]	195.1[r]	188.0	188.7	188.5	189.3	189.1	189.0	187.7	191.7
26 U.S. government securities	81.2[r]	89.2[r]	88.0[r]	88.8[r]	85.4	83.0	80.7	79.7	80.6	79.3	78.4	81.0
27 Trading account	17.5[r]	22.9[r]	20.0[r]	21.6[r]	19.9	17.3	15.6	14.8	15.1	14.5	14.1	16.8
28 Investment account	63.7[r]	66.3[r]	68.0[r]	67.1[r]	65.5	65.7	65.1	64.9	65.5	64.8	64.3	64.3
29 Other securities	140.7	109.6	106.3	106.3	102.5	105.6	107.8	109.6	108.4	109.7	109.2	110.6
30 Trading account	91.7	66.5	64.8	63.3	60.9	65.2	70.0	71.8	70.7	72.3	70.9	73.0
31 Investment account	49.0	43.1	41.4	43.0	41.7	40.5	37.8	37.8	37.7	37.5	38.4	37.7
32 Loans and leases in bank credit[2]	401.3	348.4	340.3[r]	334.2[r]	329.3	331.2	329.2	332.4	331.7	330.3	332.7	332.0
33 Commercial and industrial	224.1[r]	207.8[r]	199.3[r]	195.0[r]	191.9	193.8	196.8	200.1	199.6	199.3	200.8	200.1
34 Real estate	23.8[r]	19.7	19.6	19.0	18.2	17.5	17.6	18.0	18.2	18.0	17.9	17.9
35 Security[3]	69.9[r]	51.9[r]	53.0[r]	52.2[r]	52.2	55.0	51.4	51.4	50.8	50.4	50.8	51.0
36 Other loans and leases	83.6[r]	69.0[r]	68.5[r]	68.0[r]	67.0	65.0	63.3	63.0	63.2	62.6	63.2	63.0
37 Interbank loans	25.6	25.4	26.6	24.5	27.4	25.7	22.9	22.9	21.8	21.2	21.4	26.2
38 Cash assets[4]	35.9	33.5	35.6	34.3	34.9	37.7	40.6	44.7	43.9	42.7	44.4	45.7
39 Other assets[5]	38.3	35.7	35.2	32.4	31.4	29.6	29.7	31.7	30.0	32.2	31.9	31.8
40 **Total assets**[6]	**722.7**[r]	**641.6**[r]	**631.7**[r]	**620.3**[r]	**610.8**	**612.6**	**610.5**	**620.8**	**616.2**	**615.0**	**617.8**	**627.1**
Liabilities												
41 Deposits	316.5	311.3	312.8	306.4	308.0	306.6	310.7	331.4	320.5	328.0	332.5	337.3
42 Transaction	15.3	9.9	10.3	10.7	10.8	10.9	11.4	11.5	11.3	11.6	11.9	11.4
43 Nontransaction	301.2	301.4	302.5	295.7	297.2	295.7	299.3	319.9	309.2	316.5	320.6	325.9
44 Borrowings	215.8	172.1	172.7	180.9	172.3	172.1	168.9	169.6	166.8	168.0	169.7	170.2
45 From banks in the U.S.	30.8	21.0	21.4	26.6	24.5	23.6	25.3	22.8	23.4	19.9	22.7	22.5
46 From others	185.0	151.1	151.3	154.4	147.8	148.6	143.7	146.8	143.4	148.1	147.1	147.7
47 Net due to related foreign offices	107.9	89.2	83.4	68.1	64.8	69.8	64.5	56.2	65.0	54.7	52.3	55.5
48 Other liabilities	78.3	66.1	59.4	61.0	62.5	61.8	64.1	62.2	61.8	61.7	61.5	63.7
49 **Total liabilities**	**718.5**	**638.7**	**628.2**	**616.4**	**607.6**	**610.4**	**608.3**	**619.4**	**614.0**	**612.4**	**616.1**	**626.7**
50 Residual (assets less liabilities)[7]	4.2[r]	2.9[r]	3.4[r]	3.9[r]	3.2	2.2	2.2	1.4	2.2	2.7	1.7	.4
MEMO												
51 Revaluation gains on off-balance-sheet items[8]	51.9	38.2	35.3	34.9	37.3	38.1	38.3	35.9	35.8	36.3	35.7	36.1
52 Revaluation losses on off-balance-sheet items[8]	47.5	38.6	34.8	34.1	36.3	36.3	37.3	35.2	34.6	35.3	34.8	36.0

Footnotes appear on p. A21.

NOTES TO TABLE 1.26

NOTE. Tables 1.26, 1.27, and 1.28 have been revised to reflect changes in the Board's H.8 statistical release, "Assets and Liabilities of Commercial Banks in the United States." Table 1.27, "Assets and Liabilities of Large Weekly Reporting Commercial Banks," and table 1.28, "Large Weekly Reporting U.S. Branches and Agencies of Foreign Banks," are no longer being published in the *Bulletin*. Instead, abbreviated balance sheets for both large and small domestically chartered banks have been included in table 1.26, parts C and D. Data are both merger-adjusted and break-adjusted. In addition, data from large weekly reporting U.S. branches and agencies of foreign banks have been replaced by balance sheet estimates of all foreign-related institutions and are included in table 1.26, part E. These data are break-adjusted.

The not-seasonally-adjusted data for all tables now contain additional balance sheet items, which were available as of October 2, 1996.

1. Covers the following types of institutions in the fifty states and the District of Columbia: domestically chartered commercial banks that submit a weekly report of condition (large domestic); other domestically chartered commercial banks (small domestic); branches and agencies of foreign banks, and Edge Act and agreement corporations (foreign-related institutions). Excludes International Banking Facilities. Data are Wednesday values or *pro rata* averages of Wednesday values. Large domestic banks constitute a universe; data for small domestic banks and foreign-related institutions are estimates based on weekly samples and on quarter-end condition reports. Data are adjusted for breaks caused by reclassifications of assets and liabilities.

The data for large and small domestic banks presented on pp. A17–19 are adjusted to remove the estimated effects of mergers between these two groups. The adjustment for mergers changes past levels to make them comparable with current levels. Estimated quantities of balance sheet items acquired in mergers are removed from past data for the bank group that contained the acquired bank and put into past data for the group containing the acquiring bank. Balance sheet data for acquired banks are obtained from Call Reports, and a ratio procedure is used to adjust past levels.

2. Excludes federal funds sold to, reverse RPs with, and loans made to commercial banks in the United States, all of which are included in "Interbank loans."

3. Consists of reverse RPs with brokers and dealers and loans to purchase and carry securities.

4. Includes vault cash, cash items in process of collection, balances due from depository institutions, and balances due from Federal Reserve Banks.

5. Excludes the due-from position with related foreign offices, which is included in "Net due to related foreign offices."

6. Excludes unearned income, reserves for losses on loans and leases, and reserves for transfer risk. Loans are reported gross of these items.

7. This balancing item is not intended as a measure of equity capital for use in capital adequacy analysis. On a seasonally adjusted basis this item reflects any differences in the seasonal patterns estimated for total assets and total liabilities.

8. Fair value of derivative contracts (interest rate, foreign exchange rate, other commodity and equity contracts) in a gain/loss position, as determined under FASB Interpretation No. 39.

9. Includes mortgage-backed securities issued by U.S. government agencies, U.S. government-sponsored enterprises, and private entities.

10. Difference between fair value and historical cost for securities classified as available-for-sale under FASB Statement No. 115. Data are reported net of tax effects. Data shown are restated to include an estimate of these tax effects.

11. Mainly commercial and industrial loans but also includes an unknown amount of credit extended to other than nonfinancial businesses.

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

A. Commercial Paper

Millions of dollars, seasonally adjusted, end of period

Item	Year ending December					1999					
	1994	1995	1996	1997	1998	Apr.	May	June	July	Aug.[r]	Sept.
1 All issuers	**595,382**	**674,904**	**775,371**	**966,699**	**1,163,303**	**1,219,789**	**1,230,009**	**1,221,020**	**1,242,107**	**1,257,658**	**1,274,726**
Financial companies[1]											
2 Dealer-placed paper, total[2]	223,038	275,815	361,147	513,307	614,142	697,030	710,857	705,603	712,718	710,320	718,380
3 Directly placed paper, total[3]	207,701	210,829	229,662	252,536	322,030	276,721	268,129	272,014	277,570	290,228	293,381
4 Nonfinancial companies[4]	164,643	188,260	184,563	200,857	227,132	246,038	251,023	243,404	251,819	257,110	262,965

1. Institutions engaged primarily in commercial, savings, and mortgage banking; sales, personal, and mortgage financing; factoring, finance leasing, and other business lending; insurance underwriting; and other investment activities.
2. Includes all financial-company paper sold by dealers in the open market.
3. As reported by financial companies that place their paper directly with investors.
4. Includes public utilities and firms engaged primarily in such activities as communications, construction, manufacturing, mining, wholesale and retail trade, transportation, and services.

B. Bankers Dollar Acceptances[1]

Millions of dollars, not seasonally adjusted, year ending September[2]

Item	1995	1996	1997	1998
1 Total amount of reporting banks' acceptances in existence	**29,242**	**25,832**	**25,774**	**14,363**
2 Amount of other banks' eligible acceptances held by reporting banks	1,249	709	736	523
3 Amount of own eligible acceptances held by reporting banks (included in item 1)	10,516	7,770	6,862	4,884
4 Amount of eligible acceptances representing goods stored in, or shipped between, foreign countries (included in item 1)	11,373	9,361	10,467	5,413

1. Includes eligible, dollar-denominated bankers acceptances legally payable in the United States. Eligible acceptances are those that are eligible for discount by Federal Reserve Banks; that is, those acceptances that meet the criteria of Paragraph 7 of Section 13 of the Federal Reserve Act (12 U.S.C. §372).
2. Data on bankers dollar acceptances are gathered from approximately 65 institutions; includes U.S. chartered commerical banks (domestic and foreign offices), U.S. branches and agencies of foreign banks, and Edge and agreement corporations. The reporting group is revised every year.

1.33 PRIME RATE CHARGED BY BANKS Short-Term Business Loans[1]

Percent per year

Date of change	Rate	Period	Average rate	Period	Average rate	Period	Average rate
1996—Jan. 1	8.50	1996	8.27	1997—Jan.	8.25	1998—July	8.50
Feb. 1	8.25	1997	8.44	Feb.	8.25	Aug.	8.50
		1998	8.35	Mar.	8.30	Sept.	8.49
1997—Mar. 26	8.50			Apr.	8.50	Oct.	8.12
		1996—Jan.	8.50	May	8.50	Nov.	7.89
1998—Sept. 30	8.25	Feb.	8.25	June	8.50	Dec.	7.75
Oct. 16	8.00	Mar.	8.25	July	8.50		
Nov. 18	7.75	Apr.	8.25	Aug.	8.50	1999—Jan.	7.75
		May	8.25	Sept.	8.50	Feb.	7.75
1999—July 1	8.00	June	8.25	Oct.	8.50	Mar.	7.75
Aug. 25	8.25	July	8.25	Nov.	8.50	Apr.	7.75
Nov. 17	8.50	Aug.	8.25	Dec.	8.50	May	7.75
		Sept.	8.25	1998—Jan.	8.50	June	7.75
		Oct.	8.25	Feb.	8.50	July	8.00
		Nov.	8.25	Mar.	8.50	Aug.	8.06
		Dec.	8.25	Apr.	8.50	Sept.	8.25
				May	8.50	Oct.	8.25
				June	8.50	Nov.	8.37

1. The prime rate is one of several base rates that banks use to price short-term business loans. The table shows the date on which a new rate came to be the predominant one quoted by a majority of the twenty-five largest banks by asset size, based on the most recent Call Report. Data in this table also appear in the Board's H.15 (519) weekly and G.13 (415) monthly statistical releases. For ordering address, see inside front cover.

1.35 INTEREST RATES Money and Capital Markets

Percent per year; figures are averages of business day data unless otherwise noted

Item	1996	1997	1998	1999				1999, week ending				
				July	Aug.	Sept.	Oct.	Oct. 1	Oct. 8	Oct. 15	Oct. 22	Oct. 29
MONEY MARKET INSTRUMENTS												
1 Federal funds[1,2,3]	5.30	5.46	5.35	4.99	5.07	5.22	5.20	5.27	5.27	5.17	5.18	5.18
2 Discount window borrowing[2,4]	5.02	5.00	4.92	4.50	4.56	4.75	4.75	4.75	4.75	4.75	4.75	4.75
Commercial paper[3,5,6]												
Nonfinancial												
3 1-month	n.a.	5.57	5.40	5.06	5.18	5.28	5.28	5.29	5.30	5.28	5.27	5.27
4 2-month	n.a.	5.57	5.38	5.08	5.23	5.29	5.30	5.30	5.30	5.31	5.30	5.30
5 3-month	n.a.	5.56	5.34	5.11	5.25	5.32	5.88	5.30	5.90	5.87	5.96	5.90
Financial												
6 1-month	n.a.	5.59	5.42	5.08	5.20	5.29	5.29	5.31	5.31	5.30	5.28	5.28
7 2-month	n.a.	5.59	5.40	5.10	5.24	5.31	5.32	5.32	5.33	5.32	5.31	5.31
8 3-month	n.a.	5.60	5.37	5.14	5.28	5.32	5.93	5.32	5.93	5.95	5.99	5.97
Commercial paper (historical)[3,5,7]												
9 1-month	5.43	5.54	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 3-month	5.41	5.58	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11 6-month	5.42	5.62	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Finance paper, directly placed (historical)[3,5,8]												
12 1-month	5.31	5.44	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 3-month	5.29	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 6-month	5.21	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bankers acceptances[3,5,9]												
15 3-month	5.31	5.54	5.39	5.16	5.30	5.37	6.02	5.50	6.00	6.00	6.01	6.06
16 6-month	5.31	5.57	5.30	5.42	5.64	5.75	5.89	5.77	5.82	5.90	5.90	5.95
Certificates of deposit, secondary market[3,10]												
17 1-month	5.35	5.54	5.49	5.13	5.25	5.34	5.36	5.35	5.37	5.36	5.36	5.36
18 3-month	5.39	5.62	5.47	5.24	5.41	5.50	6.13	5.79	6.10	6.13	6.15	6.14
19 6-month	5.47	5.73	5.44	5.58	5.83	5.89	6.04	5.90	6.00	6.05	6.09	6.07
20 Eurodollar deposits, 3-month[3,11]	5.38	5.61	5.45	5.21	5.36	5.48	6.09	5.74	6.06	6.09	6.14	6.12
U.S. Treasury bills												
Secondary market[3,5]												
21 3-month	5.01	5.06	4.78	4.55	4.72	4.68	4.86	4.71	4.69	4.84	4.97	4.96
22 6-month	5.08	5.18	4.83	4.58	4.87	4.88	4.98	4.79	4.88	4.94	5.03	5.10
23 1-year	5.22	5.32	4.80	4.75	4.91	4.96	5.12	4.94	5.03	5.11	5.16	5.20
Auction high[3,5,12]												
24 3-month	5.02	5.07	4.81	4.60	4.76	4.73	4.88	4.72	4.73	4.78	4.99	5.00
25 6-month	5.09	5.18	4.85	4.62	4.88	4.91	4.98	4.81	4.87	4.93	5.00	5.12
26 1-year	5.23	5.36	4.85	4.71	4.95	5.00	5.12	n.a.	n.a.	5.12	n.a.	n.a.
U.S. TREASURY NOTES AND BONDS												
Constant maturities[13]												
27 1-year	5.52	5.63	5.05	5.03	5.20	5.25	5.43	5.24	5.34	5.42	5.47	5.51
28 2-year	5.84	5.99	5.13	5.55	5.68	5.66	5.86	5.66	5.78	5.85	5.92	5.92
29 3-year	5.99	6.10	5.14	5.62	5.77	5.75	5.94	5.73	5.87	5.92	5.99	6.01
30 5-year	6.18	6.22	5.15	5.68	5.84	5.80	6.03	5.81	5.95	6.03	6.09	6.09
31 7-year	6.34	6.33	5.28	5.94	6.15	6.12	6.33	6.12	6.24	6.35	6.40	6.36
32 10-year	6.44	6.35	5.26	5.79	5.94	5.92	6.11	5.92	6.02	6.11	6.18	6.16
33 20-year	6.83	6.69	5.72	6.28	6.43	6.50	6.66	6.50	6.58	6.68	6.74	6.68
34 30-year	6.71	6.61	5.58	5.98	6.07	6.07	6.26	6.09	6.17	6.28	6.34	6.30
Composite												
35 More than 10 years (long-term)	6.80	6.67	5.69	6.22	6.37	6.43	6.60	6.43	6.51	6.61	6.67	6.61
STATE AND LOCAL NOTES AND BONDS												
Moody's series[14]												
36 Aaa	5.52	5.32	4.93	5.24	5.47	5.56	5.78	5.56	5.69	5.75	5.82	5.85
37 Baa	5.79	5.50	5.14	5.64	5.93	6.06	6.23	6.10	6.15	6.20	6.26	6.31
38 *Bond Buyer* series[15]	5.76	5.52	5.09	5.36	5.58	5.69	5.92	5.73	5.80	5.89	5.98	5.99
CORPORATE BONDS												
39 Seasoned issues, all industries[16]	7.66	7.54	6.87	7.57	7.77	7.78	7.93	7.79	7.84	7.95	8.00	7.95
Rating group												
40 Aaa	7.37	7.27	6.53	7.19	7.40	7.39	7.55	7.39	7.47	7.59	7.64	7.55
41 Aa	7.55	7.48	6.80	7.48	7.68	7.68	7.79	7.67	7.71	7.80	7.85	7.83
42 A	7.69	7.54	6.93	7.65	7.84	7.84	7.99	7.85	7.91	8.01	8.06	8.01
43 Baa	8.05	7.87	7.22	7.95	8.15	8.20	8.38	8.24	8.28	8.40	8.44	8.42
MEMO												
Dividend–price ratio[17]												
44 Common stocks	2.19	1.77	1.49	1.20	1.25	1.27	1.28	1.31	1.26	1.29	1.29	1.29

1. The daily effective federal funds rate is a weighted average of rates on trades through New York brokers.
2. Weekly figures are averages of seven calendar days ending on Wednesday of the current week; monthly figures include each calendar day in the month.
3. Annualized using a 360-day year or bank interest.
4. Rate for the Federal Reserve Bank of New York.
5. Quoted on a discount basis.
6. Interest rates interpolated from data on certain commercial paper trades settled by the Depository Trust Company. The trades represent sales of commercial paper by dealers or direct issuers to investors (that is, the offer side). See Board's Commercial Paper Web pages (http://www.federalreserve.gov/releases/cp) for more information.
7. An average of offering rates on commercial paper for firms whose bond rating is AA or the equivalent. Series ended August 29, 1997.
8. An average of offering rates on paper directly placed by finance companies. Series ended August 29, 1997.
9. Representative closing yields for acceptances of the highest-rated money center banks.
10. An average of dealer offering rates on nationally traded certificates of deposit.
11. Bid rates for Eurodollar deposits collected around 9:30 a.m. Eastern time. Data are for indication purposes only.
12. Auction date for daily data; weekly and monthly averages computed on an issue-date basis. On or after October 28, 1998, data are stop yields from uniform-price auctions. Before that, they are weighted average yields from multiple-price auctions.
13. Yields on actively traded issues adjusted to constant maturities. Source: U.S. Department of the Treasury.
14. General obligation bonds based on Thursday figures; Moody's Investors Service.
15. State and local government general obligation bonds maturing in twenty years are used in compiling this index. The twenty-bond index has a rating roughly equivalent to Moodys' A1 rating. Based on Thursday figures.
16. Daily figures from Moody's Investors Service. Based on yields to maturity on selected long-term bonds.
17. Standard & Poor's corporate series. Common stock ratio is based on the 500 stocks in the price index.

NOTE. Some of the data in this table also appear in the Board's H.15 (519) weekly and G.13 (415) monthly statistical releases. For ordering address, see inside front cover.

1.36 STOCK MARKET Selected Statistics

Indicator	1996	1997	1998	1999 Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
	Prices and trading volume (averages of daily figures)[1]											
Common stock prices (indexes)												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	357.98	456.99	550.65	588.70	603.69	627.75	635.62	629.53	648.83	621.03	607.87	599.04
2 Industrial	453.57	574.97	684.35	736.20	751.93	780.84	791.72	783.96	809.33	778.82	769.47	753.94
3 Transportation	327.30	415.08	468.61	477.47	491.25	523.08	537.88	520.66	528.72	492.13	462.33	450.13
4 Utility	126.36	143.87	190.52	218.24	218.11	228.48	242.98	241.36	250.50	241.84	237.71	285.16
5 Finance	303.94	424.84	516.65	514.75	544.08	564.99	562.66	546.43	557.92	521.59	493.37	490.92
6 Standard & Poor's Corporation (1941–43 = 10)[2]	670.49	873.43	1,085.50	1,246.58	1,281.66	1,334.76	1,332.07	1,322.55	1,380.99	1,327.49	1,318.17	1,300.01
7 American Stock Exchange (Aug. 31, 1973 = 50)[3]	570.86	628.34	682.69	699.15	711.08	748.29	787.02	772.01	803.75	781.33	788.74	786.96
Volume of trading (thousands of shares)												
8 New York Stock Exchange	409,740	523,254	666,534	756,932	776,538	874,818	785,778	723,025	721,294	709,569	772,627	882,422
9 American Stock Exchange	22,567	24,390	28,870	31,774	29,563	38,895	35,241	28,806	25,754	27,795	32,540	35,762
	Customer financing (millions of dollars, end-of-period balances)											
10 Margin credit at broker–dealers[4]	**97,400**	**126,090**	**140,980**	**151,530**	**156,440**	**172,880**	**177,984**	**176,930**	**178,360**	**176,390**	**179,316**	**182,272**
Free credit balances at brokers[5]												
11 Margin accounts[6]	22,540	31,410	40,250	38,850	40,120	41,200	41,250	42,865	44,330	44,230	47,125	51,040
12 Cash accounts	40,430	52,160	62,450	57,910	59,435	60,870	61,665	64,100	60,000	62,600	62,810	61,085

Margin requirements (percent of market value and effective date)[7]

	Mar. 11, 1968	June 8, 1968	May 6, 1970	Dec. 6, 1971	Nov. 24, 1972	Jan. 3, 1974
13 Margin stocks	70	80	65	55	65	50
14 Convertible bonds	50	60	50	50	50	50
15 Short sales	70	80	65	55	65	50

1. Daily data on prices are available upon request to the Board of Governors. For ordering address, see inside front cover.
2. In July 1976 a financial group, composed of banks and insurance companies, was added to the group of stocks on which the index is based. The index is now based on 400 industrial stocks (formerly 425), 20 transportation (formerly 15 rail), 40 public utility (formerly 60), and 40 financial.
3. On July 5, 1983, the American Stock Exchange rebased its index, effectively cutting previous readings in half.
4. Since July 1983, under the revised Regulation T, margin credit at broker–dealers has included credit extended against stocks, convertible bonds, stocks acquired through the exercise of subscription rights, corporate bonds, and government securities. Separate reporting of data for margin stocks, convertible bonds, and subscription issues was discontinued in April 1984.
5. Free credit balances are amounts in accounts with no unfulfilled commitments to brokers and are subject to withdrawal by customers on demand.
6. Series initiated in June 1984.
7. Margin requirements, stated in regulations adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit that can be used to purchase and carry "margin securities" (as defined in the regulations) when such credit is collateralized by securities. Margin requirements on securities are the difference between the market value (100 percent) and the maximum loan value of collateral as prescribed by the Board. Regulation T was adopted effective Oct. 15, 1934; Regulation U, effective May 1, 1936; Regulation G, effective Mar. 11, 1968; and Regulation X, effective Nov. 1, 1971.

On Jan. 1, 1977, the Board of Governors for the first time established in Regulation T the initial margin required for writing options on securities, setting it at 30 percent of the current market value of the stock underlying the option. On Sept. 30, 1985, the Board changed the required initial margin, allowing it to be the same as the option maintenance margin required by the appropriate exchange or self-regulatory organization; such maintenance margin rules must be approved by the Securities and Exchange Commission.

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year			Calendar year					
				1999					
	1997	1998	1999	May	June	July	Aug.	Sept.	Oct.
U.S. budget[1]									
1 Receipts, total	1,579,292	1,721,798	1,827,285	98,663	199,507	121,923	126,324	200,396	121,035
2 On-budget	1,187,302	1,305,999	1,382,817	62,722	156,929	87,959	91,554	161,304	89,009
3 Off-budget	391,990	415,799	444,468	35,941	42,578	33,964	34,770	39,092	32,026
4 Outlays, total	1,601,235	1,652,552	1,703,639	122,631	145,939	147,086	129,127	143,059	147,701
5 On-budget	1,290,609	1,335,948	1,382,861	91,434	136,141	117,652	97,984	108,846	119,506
6 Off-budget	310,626	316,604	320,778	31,197	9,799	29,434	31,143	35,119	28,196
7 Surplus or deficit (−), total	−21,943	69,246	123,646	−23,969	53,568	−25,164	−2,803	57,336	−26,667
8 On-budget	−103,307	−29,949	−45	−28,712	20,788	−29,693	−6,430	52,458	−30,497
9 Off-budget	81,364	99,195	123,691	4,744	32,779	4,530	3,627	3,973	3,830
Source of financing (total)									
10 Borrowing from the public	38,171	−51,211	−88,304	−551	−22,246	1,193	26,470	−47,718	5,754
11 Operating cash (decrease, or increase (−))	604	4,743	−17,580	32,495	−27,459	13,553	3,160	−20,069	8,891
12 Other[2]	−16,832	−22,778	−17,762	−7,975	−3,863	10,418	−26,827	10,451	12,022
MEMO									
13 Treasury operating balance (level, end of period)	43,621	38,878	56,458	25,643	53,102	39,549	36,389	56,458	47,567
14 Federal Reserve Banks	7,692	4,952	6,641	5,506	6,720	4,984	5,559	6,641	4,527
15 Tax and loan accounts	35,930	33,926	49,817	20,586	46,382	34,565	30,831	49,817	43,040

1. Since 1990, off-budget items have been the social security trust funds (federal old-age survivors insurance and federal disability insurance) and the U.S. Postal Service.

2. Includes special drawing rights (SDRs); reserve position on the U.S. quota in the International Monetary Fund (IMF); loans to the IMF; other cash and monetary assets; accrued interest payable to the public; allocations of SDRs; deposit funds; miscellaneous liability (including checks outstanding) and asset accounts; seigniorage; increment on gold; net gain or loss for U.S. currency valuation adjustment; net gain or loss for IMF loan-valuation adjustment; and profit on sale of gold.

SOURCE. Monthly totals: U.S. Department of the Treasury, *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government*; fiscal year totals: U.S. Office of Management and Budget, *Budget of the U.S. Government*.

1.39 U.S. BUDGET RECEIPTS AND OUTLAYS[1]

Millions of dollars

Source or type	Fiscal year 1998	Fiscal year 1999	Calendar year 1997 H2	1998 H1	1998 H2	1999 H1	1999 Aug.	1999 Sept.	1999 Oct.
RECEIPTS									
1 **All sources**	**1,721,798**	**1,827,285**	**773,810**	**922,630**	**825,057**	**966,045**	**126,324**	**200,396**	**121,035**
2 Individual income taxes, net	828,586	879,480	354,072	447,514	392,332	481,527	60,709	89,250	63,505
3 Withheld	646,483	693,940	306,865	316,309	339,144	351,068	57,476	49,244	57,596
4 Nonwithheld	281,527	308,185	58,069	219,136	65,204	240,278	5,163	43,077	7,129
5 Refunds	99,476	122,706	10,869	87,989	12,032	109,467	1,921	3,072	1,221
Corporation income taxes									
6 Gross receipts	213,249	216,325	104,659	109,353	104,163	106,861	5,115	42,571	7,175
7 Refunds	24,593	31,645	10,135	14,220	14,250	17,092	1,418	2,336	4,995
8 Social insurance taxes and contributions, net	571,831	611,832	260,795	312,713	268,466	324,831	49,389	55,481	43,879
9 Employment taxes and contributions[2]	540,014	580,880	247,794	293,520	256,142	306,235	44,960	54,794	42,412
10 Unemployment insurance	27,484	26,480	10,724	17,080	10,121	16,378	4,085	332	1,049
11 Other net receipts[3]	4,333	4,472	2,280	2,112	2,202	2,216	344	356	418
12 Excise taxes	57,673	70,399	31,133	29,922	33,366	31,015	5,397	7,167	4,181
13 Customs deposits	18,297	18,336	9,679	8,546	9,838	8,440	1,814	1,727	1,788
14 Estate and gift taxes	24,076	27,782	10,262	12,971	12,359	14,915	2,175	2,294	2,554
15 Miscellaneous receipts[4]	32,658	34,777	13,348	15,829	18,735	15,140	3,131	4,242	2,948
OUTLAYS									
16 **All types**	**1,652,552**	**1,703,639r**	**824,368**	**815,884**	**877,414**	**817,235**	**129,127**	**143,059r**	**147,701**
17 National defense	268,456	276,792	140,873	129,351	140,196	134,414	20,867	24,279	24,036
18 International affairs	13,109	15,264	9,420	4,610	8,297	6,879	530	1,382r	1,000
19 General science, space, and technology	18,219	19,397	10,040	9,426	10,142	9,319	1,681	1,773	1,524
20 Energy	1,270	981	411	957	699	797	26	375	−311
21 Natural resources and environment	22,396	22,303	11,106	10,051	12,671	10,351	1,961	2,246r	1,528
22 Agriculture	12,206	24,359	10,590	2,387	16,757	9,803	726	1,150r	6,759
23 Commerce and housing credit	1,014	2,966	−3,526	−2,483	4,046	−1,629	−1,097	6,509r	1,698
24 Transportation	40,332	38,856	20,414	16,196	20,836	17,082	3,838	4,260	3,750
25 Community and regional development	9,720	12,791	5,749	4,863	6,972	5,368	879	1,330	1,627
26 Education, training, employment, and social services	54,919	57,438	26,851	25,928	27,762	29,003	4,363	5,437	5,175
27 Health	131,440	140,803	63,552	65,053	67,838	69,320	11,959	13,031	12,229
28 Social security and Medicare	572,047	580,491	283,109	286,305	316,809	261,146	45,607	48,681	48,179
29 Income security	233,202	237,180	106,353	125,196	109,481	126,552	16,505	16,897	17,607
30 Veterans benefits and services	41,781	43,210	22,077	19,615	22,750	20,105	1,895	3,615	3,657
31 Administration of justice	22,832	25,837	10,212	11,287	12,041	13,149	2,349	2,306	2,127
32 General government	13,444	16,058	7,302	6,139	9,136	6,650	200	1,696r	1,117
33 Net interest[5]	243,359	230,265	122,620	122,345	116,954	116,655	19,931	15,259	18,894
34 Undistributed offsetting receipts[6]	−47,194	−40,445	−22,795	−21,340	−25,793	−17,724	−3,095	−7,164	−2,896

1. Functional details do not sum to total outlays for calendar year data because revisions to monthly totals have not been distributed among functions. Fiscal year total for receipts and outlays do not correspond to calendar year data because revisions from the *Budget* have not been fully distributed across months.

2. Old-age, disability, and hospital insurance, and railroad retirement accounts.

3. Federal employee retirement contributions and civil service retirement and disability fund.

4. Deposits of earnings by Federal Reserve Banks and other miscellaneous receipts.

5. Includes interest received by trust funds.

6. Rents and royalties for the outer continental shelf, U.S. government contributions for employee retirement, and certain asset sales.

SOURCE. Fiscal year totals: U.S. Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 2000*; monthly and half-year totals: U.S. Department of the Treasury, *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government*.

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars, end of month

Item	1997		1998				1999		
	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30
1 **Federal debt outstanding**	**5,446**	**5,536**	**5,573**	**5,578**	**5,556**	**5,643**	**5,681**	**5,668**	**5,685[r]**
2 Public debt securities	5,413	5,502	5,542	5,548	5,526	5,614	5,652	5,639	5,656
3 Held by public	3,815	3,847	3,872	3,790	3,761	3,787	3,795	3,685	n.a.
4 Held by agencies	1,599	1,656	1,670	1,758	1,766	1,827	1,857	1,954	n.a.
5 Agency securities	33	34	31	30	29	29	29	29	29[r]
6 Held by public	26	27	26	26	26	29	28	28	n.a.
7 Held by agencies	7	7	5	4	4	1	1	1	n.a.
8 **Debt subject to statutory limit**	**5,328**	**5,417**	**5,457**	**5,460**	**5,440**	**5,530**	**5,566**	**5,552**	**5,568**
9 Public debt securities	5,328	5,416	5,456	5,460	5,439	5,530	5,566	5,552	5,568
10 Other debt[1]	0	0	0	0	0	0	0	0	0
MEMO									
11 Statutory debt limit	5,950	5,950	5,950	5,950	5,950	5,950	5,950	5,950	5,950

1. Consists of guaranteed debt of U.S. Treasury and other federal agencies, specified participation certificates, notes to international lending organizations, and District of Columbia stadium bonds.

SOURCE. U.S. Department of the Treasury, *Monthly Statement of the Public Debt of the United States* and *Treasury Bulletin*.

1.41 GROSS PUBLIC DEBT OF U.S. TREASURY Types and Ownership

Billions of dollars, end of period

Type and holder	1995	1996	1997	1998	1998	1999		
					Q4	Q1	Q2	Q3
1 **Total gross public debt**	**4,988.7**	**5,323.2**	**5,502.4**	**5,614.2**	**5,614.2**	**5,651.6**	**5,638.8**	**5,656.3**
By type								
2 Interest-bearing	4,964.4	5,317.2	5,494.9	5,605.4	5,605.4	5,643.1	5,629.5	5,647.2
3 Marketable	3,307.2	3,459.7	3,456.8	3,355.5	3,355.5	3,361.3	3,248.5	3,233.0
4 Bills	760.7	777.4	715.4	691.0	691.0	725.5	647.8	653.2
5 Notes	2,010.3	2,112.3	2,106.1	1,960.7	1,960.7	1,912.0	1,868.5	1,828.8
6 Bonds	521.2	555.0	587.3	621.2	621.2	632.5	632.5	643.7
7 Inflation-indexed notes and bonds[1]	n.a.	n.a.	33.0	50.6	50.6	59.2	59.9	67.6
8 Nonmarketable[2]	1,657.2	1,857.5	2,038.1	2,249.9	2,249.9	2,281.8	2,381.0	2,414.2
9 State and local government series	104.5	101.3	124.1	165.3	165.3	167.5	172.6	168.1
10 Foreign issues[3]	40.8	37.4	36.2	34.3	34.3	33.5	30.9	31.0
11 Government	40.8	47.4	36.2	34.3	34.3	33.5	30.9	31.0[r]
12 Public	.0	.0	.0	.0	.0	.0	.0	.0
13 Savings bonds and notes	181.9	182.4	181.2	180.3	180.3	180.6	180.0	180.0
14 Government account series[4]	1,299.6	1,505.9	1,666.7	1,840.0	1,840.0	1,870.2	1,967.5	2,005.2
15 Non-interest-bearing	24.3	6.0	7.5	8.8	8.8	8.5	9.3	9.0
By holder[5]								
16 U.S. Treasury and other federal agencies and trust funds	1,304.5	1,497.2	1,655.7	1,826.8	1,826.8	1,857.1	1,953.6	
17 Federal Reserve Banks	391.0	410.9	451.9	471.7	471.7	464.5	493.8	
18 Private investors	3,307.7	3,431.2	3,414.6	3,334.0	3,334.0	3,327.6	3,199.3	
19 Depository institutions	315.4	296.6	300.3	237.4	237.4	247.6	n.a.	
20 Mutual funds	286.5	315.8	321.3	339.5	339.5	341.3	n.a.	
21 Insurance companies	241.5	214.1	176.6	144.6	144.6	137.7	n.a.	n.a.
22 State and local treasuries[6]	289.8	257.0	239.3	269.3	269.3	266.6	n.a.	
Individuals								
23 Savings bonds	185.0	187.0	186.5	186.7	186.7	186.6	186.6	
24 Pension funds	474.5	505.1	539.1	547.0	547.0	544.9	n.a.	
25 Private	298.7	314.6	334.3	345.4	345.4	347.3	n.a.	
26 State and Local	175.8	190.5	204.8	201.6	201.6	197.6	n.a.	
27 Foreign and international[7]	835.2	1,102.1	1,241.6	1,278.7	1,278.7	1,270.8	1,257.3	
28 Other miscellaneous investors[6,8]	679.7	553.5	409.9	330.8	330.8	332.1	n.a.	

1. The U.S. Treasury first issued inflation-indexed securities during the first quarter of 1997.
2. Includes (not shown separately) securities issued to the Rural Electrification Administration, depository bonds, retirement plan bonds, and individual retirement bonds.
3. Nonmarketable series denominated in dollars, and series denominated in foreign currency held by foreigners.
4. Held almost entirely by U.S. Treasury and other federal agencies and trust funds.
5. Data for Federal Reserve Banks and U.S. government agencies and trust funds are actual holdings; data for other groups are Treasury estimates.
6. In March 1996, in a redefinition of series, fully defeased debt backed by nonmarketable federal securities was removed from "Other miscellaneous investors" and added to "State and local treasuries." The data shown here have been revised accordingly.
7. Includes nonmarketable foreign series treasury securities and treasury deposit funds. Excludes treasury securities held under repurchase agreements in custody accounts at the Federal Reserve Bank of New York.
8. Includes individuals, government-sponsored enterprises, brokers and dealers, bank personal trusts and estates, corporate and noncorporate businesses, and other investors.

SOURCE. U.S. Treasury Department, data by type of security, *Monthly Statement of the Public Debt of the United States*; data by holder, *Treasury Bulletin*.

1.42 U.S. GOVERNMENT SECURITIES DEALERS Transactions[1]

Millions of dollars, daily averages

Item	1999			1999, week ending								
	July	Aug.	Sept.	Sept. 1	Sept. 8	Sept. 15	Sept. 22	Sept. 29	Oct. 6	Oct. 13	Oct. 20	Oct. 27
OUTRIGHT TRANSACTIONS[2]												
By type of security												
1 U.S. Treasury bills	24,009	26,323	27,445	38,241	27,843	32,118	23,234	24,693	26,101	23,011	24,314	22,047
Coupon securities, by maturity												
2 Five years or less	93,047	99,186	82,426	95,890	81,430	77,284	68,958	95,035	103,945	86,924	82,519	90,643
3 More than five years	53,586	68,592	54,516	60,198	49,912	59,754	44,882	62,209	55,369	53,537	61,196	55,937
4 Inflation-indexed	1,372	826	586	1,006	475	462	347	629	2,314	562	1,499	506
Federal agency												
5 Discount notes	43,320	45,889	46,570	48,585	46,278	47,150	43,798	47,373	52,951	46,227	42,441	42,844
Coupon securities, by maturity												
6 One year or less	652	777	1,018	818	964	987	898	1,279	939	968	849	790
7 More than one year, but less than or equal to five years	4,592	5,126	5,858	6,068	4,235	4,681	5,336	9,346	4,810	9,770	5,901	4,641
8 More than five years	4,278	4,832	4,593	5,361	2,843	7,416	4,031	4,149	3,479	3,856	3,737	3,006
9 Mortgage-backed	69,129	66,417	64,305	52,887	79,337	93,477	41,392	44,491	68,329	102,275	46,148	44,349
By type of counterparty												
With interdealer broker												
10 U.S. Treasury	93,223	105,210	88,466	103,077	85,541	90,150	72,030	100,747	100,831	85,585	92,226	93,708
11 Federal agency	3,677	4,070	4,534	3,407	3,470	4,800	5,686	4,507	4,023	5,426	5,662	4,720
12 Mortgage-backed	25,013	25,261	23,835	23,534	23,324	34,704	17,418	20,472	21,249	30,508	18,721	17,042
With other												
13 U.S. Treasury	78,790	89,717	76,506	92,258	74,118	79,468	65,392	81,819	86,898	78,448	77,302	75,426
14 Federal agency	49,164	52,553	53,504	57,426	50,850	55,435	48,377	57,639	58,157	55,394	47,267	46,560
15 Mortgage-backed	44,117	41,156	40,469	29,353	56,013	58,773	23,974	24,019	47,080	71,768	27,427	27,307
FUTURES TRANSACTIONS[3]												
By type of deliverable security												
16 U.S. Treasury bills	0	0	0	0	n.a.	n.a.	n.a.	0	n.a.	n.a.	n.a.	n.a.
Coupon securities, by maturity												
17 Five years or less	2,469	4,701	2,226	4,400	2,538	2,167	1,720	1,819	3,354	2,186	3,050	1,862
18 More than five years	12,348	14,980	13,642	17,151	13,485	14,803	11,765	14,028	12,564	10,767	14,003	12,112
19 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0	0
Federal agency												
20 Discount notes	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
21 One year or less	0	0	0	0	0	0	0	0	0	0	0	0
22 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0	0
23 More than five years	0	0	0	0	0	0	0	0	0	0	0	0
24 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0	0
OPTIONS TRANSACTIONS[4]												
By type of underlying security												
25 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
26 Five years or less	951	1,197	842	1,074	879	989	754	645	1,110	1,244	996	591
27 More than five years	3,892	4,480	3,440	2,546	4,611	2,935	2,705	3,710	3,332	3,377	4,531	3,190
28 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0	0
Federal agency												
29 Discount notes	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
30 One year or less	0	0	0	0	0	0	0	0	0	0	0	0
31 More than one year, but less than or equal to five years	0	0	0	0	n.a.	n.a.	n.a.	n.a.	0	0	0	n.a.
32 More than five years	0	0	0	n.a.	n.a.	0	n.a.	0	n.a.	n.a.	0	0
33 Mortgage-backed	1,175	1,033	917	1,081	1,224	546	1,396	587	331	390	447	652

1. Transactions are market purchases and sales of securities as reported to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers. Monthly averages are based on the number of trading days in the month. Transactions are assumed to be evenly distributed among the trading days of the report week. Immediate, forward, and futures transactions are reported at principal value, which does not include accrued interest; options transactions are reported at the face value of the underlying securities.

Dealers report cumulative transactions for each week ending Wednesday.

2. Outright transactions include immediate and forward transactions. Immediate delivery refers to purchases or sales of securities (other than mortgage-backed federal agency securities) for which delivery is scheduled in five business days or less and "when-issued" securities that settle on the issue date of offering. Transactions for immediate delivery of mortgage-backed agency securities include purchases and sales for which delivery is scheduled in thirty business days or less. Stripped securities are reported at market value by maturity of coupon or corpus.

Forward transactions are agreements made in the over-the-counter market that specify delayed delivery. Forward contracts for U.S. Treasury securities and federal agency debt securities are included when the time to delivery is more than five business days. Forward contracts for mortgage-backed agency securities are included when the time to delivery is more than thirty business days.

3. Futures transactions are standardized agreements arranged on an exchange. All futures transactions are included regardless of time to delivery.

4. Options transactions are purchases or sales of put and call options, whether arranged on an organized exchange or in the over-the-counter market, and include options on futures contracts on U.S. Treasury and federal agency securities.

NOTE. "n.a." indicates that data are not published because of insufficient activity.

1.43 U.S. GOVERNMENT SECURITIES DEALERS Positions and Financing[1]

Millions of dollars

Item	1999			1999, week ending							
	July	Aug.	Sept.	Sept. 1	Sept. 8	Sept. 15	Sept. 22	Sept. 29	Oct. 6	Oct. 13	Oct. 20
	Positions[2]										
NET OUTRIGHT POSITIONS[3]											
By type of security											
1 U.S. Treasury bills	4,005	165	1,862	7,295	5,816	−1,306	2,541	−341	1,598	8,456	8,929
Coupon securities, by maturity											
2 Five years or less	−25,332	−31,236	−33,167	−30,286	−33,085	−34,425	−35,223	−30,337	−33,225	−35,289	−39,504
3 More than five years	−14,263	−7,689	−14,651	−7,215	−9,493	−15,435	−18,404	−15,694	−19,135	−21,983	−22,914
4 Inflation-indexed	3,202	3,370	3,758	3,774	3,703	3,799	3,940	3,531	4,161	4,035	3,528
Federal agency											
5 Discount notes	21,732	29,448	38,620	32,385	36,636	40,505	40,704	37,279	40,332	39,198	35,664
Coupon securities, by maturity											
6 One year or less	3,233	4,065	5,158	5,297	4,905	4,771	5,392	5,246	7,256	5,764	5,706
7 More than one year, but less than or equal to five years	7,633	6,923	6,989	8,216	7,354	6,918	6,443	7,430	4,438	5,018	4,406
8 More than five years	2,882	1,023	2,346	1,200	1,736	2,877	2,418	2,615	1,664	2,981	3,119
9 Mortgage-backed	18,844	17,990	18,585	16,238	17,132	20,159	22,066	15,596	16,636	22,120	22,955
NET FUTURES POSITIONS[4]											
By type of deliverable security											
10 U.S. Treasury bills	0	0	0	0	n.a.	0	0	n.a.	n.a.	n.a.	n.a.
Coupon securities, by maturity											
11 Five years or less	7,576	10,940	7,803	7,650	8,136	8,176	8,247	6,301	10,411	12,073	9,928
12 More than five years	−4,401	−5,879	−420	−7,434	−4,965	2,020	203	1,302	4,912	9,957	11,952
13 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0
Federal agency											
14 Discount notes	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
15 One year or less	0	0	0	0	0	0	0	0	0	0	0
16 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0
17 More than five years	0	0	0	0	0	0	0	0	0	0	0
18 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0
NET OPTIONS POSITIONS											
By type of deliverable security											
19 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
20 Five years or less	−2,059	−1,661	−57	−878	−555	−456	523	456	−614	−1,441	−2,486
21 More than five years	89	−553	−1,552	−1,725	−2,364	−1,304	−671	−1,483	−4,075	−4,888	−2,656
22 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0
Federal agency											
23 Discount notes	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
24 One year or less	0	0	0	0	0	0	0	0	0	0	0
25 More than one year, but less than or equal to five years	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
26 More than five years	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	32	32
27 Mortgage-backed	2,070	3,540	2,105	4,630	2,468	1,443	2,097	2,103	1,728	1,053	826
	Financing[5]										
Reverse repurchase agreements											
28 Overnight and continuing	258,349	273,639	290,610	274,150	276,844	297,141	286,250	303,871	295,403	289,515	293,341
29 Term	821,067	780,367	792,662	733,653	757,629	793,309	821,609	810,388	765,661	792,836	810,239
Securities borrowed											
30 Overnight and continuing	254,405	254,149	250,667	253,085	252,062	251,946	253,559	243,384	260,255	254,576	257,963
31 Term	90,588	87,850	91,796	83,148	84,953	91,765	95,900	95,524	93,727	93,874	98,054
Securities received as pledge											
32 Overnight and continuing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,583	2,393
33 Term	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Repurchase agreements											
34 Overnight and continuing	675,629	694,296	692,032	696,064	686,295	699,375	697,399	684,837	689,566	691,509	695,993
35 Term	688,157	650,774	680,923	605,775	631,178	674,289	710,400	724,393	640,089	660,904	693,946
Securities loaned											
36 Overnight and continuing	11,458	9,885	9,063	9,492	9,022	9,194	8,974	9,006	9,019	9,106	8,814
37 Term	6,991	7,269	7,026	7,031	7,012	6,966	7,453	6,689	6,916	6,671	7,412
Securities pledged											
38 Overnight and continuing	55,853	53,526	53,966	51,878	52,453	53,386	55,262	54,502	57,870	57,441	52,812
39 Term	9,530	8,213	8,116	7,920	7,914	8,034	8,153	8,354	8,370	8,276	8,383
Collateralized loans											
40 Total	17,509	18,826	23,284	20,879	20,894	21,840	26,460	24,024	25,111	20,695	27,676

1. Data for positions and financing are obtained from reports submitted to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers. Weekly figures are close-of-business Wednesday data. Positions for calendar days of the report week are assumed to be constant. Monthly averages are based on the number of calendar days in the month.

2. Securities positions are reported at market value.

3. Net outright positions include immediate and forward positions. Net immediate positions include securities purchased or sold (other than mortgage-backed agency securities) that have been delivered or are scheduled to be delivered in five business days or less and "when-issued" securities that settle on the issue date of offering. Net immediate positions for mortgage-backed agency securities include securities purchased or sold that have been delivered or are scheduled to be delivered in thirty business days or less.

Forward positions reflect agreements made in the over-the-counter market that specify delayed delivery. Forward contracts for U.S. Treasury securities and federal agency debt securities are included when the time to delivery is more than five business days. Forward contracts for mortgage-backed agency securities are included when the time to delivery is more than thirty business days.

4. Futures positions reflect standardized agreements arranged on an exchange. All futures positions are included regardless of time to delivery.

5. Overnight financing refers to agreements made on one business day that mature on the next business day; continuing contracts are agreements that remain in effect for more than one business day but have no specific maturity and can be terminated without advance notice by either party; term agreements have a fixed maturity of more than one business day. Financing data are reported in terms of actual funds paid or received, including accrued interest.

NOTE. "n.a." indicates that data are not published because of insufficient activity.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1995	1996	1997	1998	1999				
					Apr.	May	June	July	Aug.
1 **Federal and federally sponsored agencies**	**844,611**	**925,823**	**1,022,609**	**1,296,477**	**1,377,524**	**1,404,576**	**1,425,396**	**1,457,925[r]**	**1,491,900**
2 Federal agencies	37,347	29,380	27,792	26,502	26,100	26,094	26,370	26,204	26,107
3 Defense Department[1]	6	6	6	6	6	6	6	6	6
4 Export-Import Bank[2,3]	2,050	1,447	552	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5 Federal Housing Administration[4]	97	84	102	205	84	88	99	105	109
6 Government National Mortgage Association certificates of participation[5]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7 Postal Service[6]	5,765	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8 Tennessee Valley Authority	29,429	27,853	27,786	26,496	26,094	26,088	26,364	26,198	26,101
9 United States Railway Association[6]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 Federally sponsored agencies[7]	807,264	896,443	994,817	1,269,975	1,351,424	1,378,482	1,399,026	1,431,721	1,465,793
11 Federal Home Loan Banks	243,194	263,404	313,919	382,131	415,602	421,655	437,109	444,775	458,320
12 Federal Home Loan Mortgage Corporation	119,961	156,980	169,200	287,396	310,387	317,533	314,412	334,575	340,972
13 Federal National Mortgage Association	299,174	331,270	369,774	460,291	478,994	492,913	499,897	502,653	517,200
14 Farm Credit Banks[8]	57,379	60,053	63,517	63,488	67,527	66,608	67,749	66,922	67,269
15 Student Loan Marketing Association[9]	47,529	44,763	37,717	35,399	37,660	38,129	37,959	40,843	40,310
16 Financing Corporation[10]	8,170	8,170	8,170	8,170	8,170	8,170	8,170	8,170	8,170
17 Farm Credit Financial Assistance Corporation[11]	1,261	1,261	1,261	1,261	1,261	1,261	1,261	1,261	1,261
18 Resolution Funding Corporation[12]	29,996	29,996	29,996	29,996	29,996	29,996	29,996	29,996	29,996
MEMO									
19 **Federal Financing Bank debt[13]**	**78,681**	**58,172**	**49,090**	**44,129**	**41,637**	**41,131**	**40,585**	**39,901**	**39,341**
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	2,044	1,431	552	↑	↑	↑	↑	↑	↑
21 Postal Service[6]	5,765	n.a.	n.a.						
22 Student Loan Marketing Association	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23 Tennessee Valley Authority	3,200	n.a.	n.a.						
24 United States Railway Association[6]	n.a.	n.a.	n.a.	↓	↓	↓	↓	↓	↓
Other lending[14]									
25 Farmers Home Administration	21,015	18,325	13,530	9,500	8,550	8,275	7,935	7,445	7,270
26 Rural Electrification Administration	17,144	16,702	14,898	14,091	13,999	13,997	13,877	13,944	13,969
27 Other	29,513	21,714	20,110	20,538	19,088	18,859	18,773	18,512	18,102

1. Consists of mortgages assumed by the Defense Department between 1957 and 1963 under family housing and homeowners assistance programs.
2. Includes participation certificates reclassified as debt beginning Oct. 1, 1976.
3. On-budget since Sept. 30, 1976.
4. Consists of debentures issued in payment of Federal Housing Administration insurance claims. Once issued, these securities may be sold privately on the securities market.
5. Certificates of participation issued before fiscal year 1969 by the Government National Mortgage Association acting as trustee for the Farmers Home Administration, the Department of Health, Education, and Welfare, the Department of Housing and Urban Development, the Small Business Administration, and the Veterans Administration.
6. Off-budget.
7. Includes outstanding noncontingent liabilities: notes, bonds, and debentures. Includes Federal Agricultural Mortgage Corporation, therefore details do not sum to total. Some data are estimated.
8. Excludes borrowing by the Farm Credit Financial Assistance Corporation, which is shown on line 17.
9. Before late 1982, the association obtained financing through the Federal Financing Bank (FFB). Borrowing excludes that obtained from the FFB, which is shown on line 22.
10. The Financing Corporation, established in August 1987 to recapitalize the Federal Savings and Loan Insurance Corporation, undertook its first borrowing in October 1987.
11. The Farm Credit Financial Assistance Corporation, established in January 1988 to provide assistance to the Farm Credit System, undertook its first borrowing in July 1988.
12. The Resolution Funding Corporation, established by the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, undertook its first borrowing in October 1989.
13. The FFB, which began operations in 1974, is authorized to purchase or sell obligations issued, sold, or guaranteed by other federal agencies. Because FFB incurs debt solely for the purpose of lending to other agencies, its debt is not included in the main portion of the table to avoid double counting.
14. Includes FFB purchases of agency assets and guaranteed loans; the latter are loans guaranteed by numerous agencies, with the amounts guaranteed by any one agency generally being small. The Farmers Home Administration entry consists exclusively of agency assets, whereas the Rural Electrification Administration entry consists of both agency assets and guaranteed loans.

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1996	1997	1998	1999 Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1 **All issues, new and refunding**[1]	**171,222**	**214,694**	**262,342**	**24,323**	**15,758**	**16,234**	**23,428**	**18,671**	**15,746**	**18,433**	**17,497**
By type of issue											
2 General obligation	60,409	69,934	87,015	8,323	6,443	5,294	10,997	6,206	4,268	5,171	4,183
3 Revenue	110,813	134,989	175,327	16,000	9,315	10,941	12,431	12,465	11,478	13,262	13,314
By type of issuer											
4 State	13,651	18,237	23,506	1,895	907	1,220	1,236	2,194	911	2,341	1,753
5 Special district or statutory authority[2]	113,228	134,919	178,421	14,604	10,010	11,279	18,414	13,572	11,578	13,449	12,186
6 Municipality, county, or township	44,343	70,558	60,173	7,825	4,841	3,735	3,779	2,906	3,257	2,642	3,557
7 **Issues for new capital**	**112,298**	**135,519**	**160,568**	**16,201**	**10,474**	**12,149**	**19,509**	**12,172**	**12,530**	**14,973**	**14,908**
By use of proceeds											
8 Education	26,851	31,860	36,904	3,537	2,734	2,795	3,793	3,415	2,842	2,885	2,049
9 Transportation	12,324	13,951	19,926	1,640	1,107	1,791	1,650	1,264	1,955	1,886	1,674
10 Utilities and conservation	9,791	12,219	21,037	2,839	1,372	603	1,594	535	1,038	1,976	1,176
11 Social welfare	24,583	27,794	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 Industrial aid	6,287	6,667	8,594	1,084	618	1,058	739	850	585	1,271	726
13 Other purposes	32,462	35,095	42,450	3,918	2,592	3,760	7,195	2,729	3,255	3,941	4,509

1. Par amounts of long-term issues based on date of sale.
2. Includes school districts.

SOURCE. Securities Data Company beginning January 1990; *Investment Dealer's Digest* before then.

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue, offering, or issuer	1996	1997	1998	1999 Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1 **All issues**[1]	**773,110**	**929,256**	**1,128,491**	**103,175**	**126,161**	**85,862**	**110,475**	**96,608**	**96,608**	**83,466**	**82,936**
2 **Bonds**[2]	**651,104**	**811,376**	**1,001,736**	**92,885**	**116,440**	**76,721**	**94,713**	**88,338**	**83,546**	**75,708**	**76,485**
By type of offering											
3 Sold in the United States	567,671	708,188	923,771	82,871	101,024	65,886	86,730	79,031	69,451	63,383	66,357
4 Sold abroad	83,433	103,188	77,965	10,014	15,416	10,834	7,983	9,306	14,095	12,325	10,128
MEMO											
5 Private placements, domestic	n.a.	n.a.	n.a.	648	1,224	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
By industry group											
6 Nonfinancial	167,904	222,603	307,935	23,131	39,818	30,676	32,843	24,531	25,526	22,704	21,073
7 Financial	483,200	588,773	693,801	69,754	76,623	46,045	61,870	63,807	58,020	53,005	55,412
8 **Stocks**[3]	**122,006**	**117,880**	**126,755**	**10,290**	**9,721**	**9,141**	**15,762**	**8,270**	**13,062**	**7,758**	**6,451**
By type of offering											
9 Public	122,006	117,880	126,755	10,290	9,721	9,141	15,762	8,270	13,062	7,758	6,451
10 Private placement[4]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
By industry group											
11 Nonfinancial	80,460	60,386	74,113	8,911	8,534	7,640	10,425	6,436	11,589	6,379	5,491
12 Financial	41,546	57,494	52,642	1,379	1,187	1,501	5,337	1,834	1,473	1,379	960

1. Figures represent gross proceeds of issues maturing in more than one year; they are the principal amount or number of units calculated by multiplying by the offering price. Figures exclude secondary offerings, employee stock plans, investment companies other than closed-end, intracorporate transactions, and Yankee bonds. Stock data include ownership securities issued by limited partnerships.
2. Monthly data include 144(a) offerings.
3. Monthly data cover only public offerings.
4. Data are not available.

SOURCE. Securities Data Company and the Board of Governors of the Federal Reserve System.

1.47 OPEN–END INVESTMENT COMPANIES Net Sales and Assets[1]

Millions of dollars

Item	1997	1998	1999							
			Mar.	Apr.	May	June	July	Aug.	Sept.[r]	Oct.
1 **Sales of own shares**[2]	**1,190,900**	**1,461,430**	**164,290**	**166,324**	**140,422**	**138,502**	**140,926**	**132,991**	**132,226**	**140,237**
2 Redemptions of own shares	918,728	1,217,022	146,479	139,035	127,800	117,953	128,173	125,908	126,207	124,011
3 Net sales[3]	272,172	244,408	17,811	27,288	12,622	20,550	12,754	7,084	6,019	16,226
4 **Assets**[4]	**3,409,315**	**4,173,531**	**4,328,150**	**4,505,237**	**4,442,880**	**4,650,385**	**4,585,131**	**4,548,784**	**4,498,964**	**4,704,277**
5 Cash[5]	174,154	191,393	198,741	211,243	211,580	214,779	209,061	209,349	209,709	225,111
6 Other	3,235,161	3,982,138	4,129,409	4,293,994	4,231,300	4,435,607	4,376,070	4,339,435	4,289,255	4,479,166

1. Data include stock, hybrid, and bond mutual funds and exclude money market mutual funds.
2. Excludes reinvestment of net income dividends and capital gains distributions and share issue of conversions from one fund to another in the same group.
3. Excludes sales and redemptions resulting from transfers of shares into or out of money market mutual funds within the same fund family.
4. Market value at end of period, less current liabilities.
5. Includes all U.S. Treasury securities and other short-term debt securities.

SOURCE. Investment Company Institute. Data based on reports of membership, which comprises substantially all open–end investment companies registered with the Securities and Exchange Commission. Data reflect underwritings of newly formed companies after their initial offering of securities.

1.48 CORPORATE PROFITS AND THEIR DISTRIBUTION

Billions of dollars; quarterly data at seasonally adjusted annual rates

Account	1996[r]	1997[r]	1998[r]	1997	1998[r]				1999		
				Q4[r]	Q1	Q2	Q3	Q4	Q1[r]	Q2[r]	Q3
1 Profits with inventory valuation and capital consumption adjustment	753.9	837.9	846.1	853.5	858.3	847.9	843.8	834.3	882.0	875.5	883.7
2 Profits before taxes	726.3	795.9	781.9	811.6	788.9	792.0	780.1	766.7	818.1	835.8	857.8
3 Profits-tax liability	223.6	238.3	240.2	244.1	239.9	241.1	244.3	235.6	248.0	254.4	259.1
4 Profits after taxes	502.7	557.6	541.7	567.4	548.9	550.9	535.8	531.0	570.1	581.4	598.6
5 Dividends	297.7	333.7	348.6	344.8	346.5	347.3	348.4	352.2	356.4	361.5	367.3
6 Undistributed profits	205.0	223.9	193.1	222.6	202.5	203.6	187.4	178.8	213.7	219.9	231.3
7 Inventory valuation	3.1	7.4	20.9	4.0	29.5	13.6	19.8	20.8	13.3	−13.6	−26.5
8 Capital consumption adjustment	24.4	34.6	43.3	38.0	39.9	42.4	43.9	46.9	50.6	53.2	52.4

SOURCE. U.S. Department of Commerce, *Survey of Current Business*.

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities[1]

Billions of dollars, end of period; not seasonally adjusted

Account	1996	1997	1998	1998				1999		
				Q1	Q2	Q3	Q4	Q1	Q2	Q3
ASSETS										
1 Accounts receivable, gross[2]	637.1	663.3	711.7	667.2	676.0	687.6	711.7	733.8	756.5	776.5
2 Consumer	244.9	256.8	261.8	251.7	251.3	254.0	261.8	261.7	269.2	271.3
3 Business	309.5	318.5	347.5	325.9	334.9	335.1	347.5	362.8	373.7	382.9
4 Real estate	82.7	87.9	102.3	89.6	89.9	98.5	102.3	109.2	113.5	122.3
5 LESS: Reserves for unearned income	55.6	52.7	56.3	52.1	53.2	52.4	56.3	52.9	53.4	54.0
6 Reserves for losses	13.1	13.0	13.8	13.1	13.2	13.2	13.8	13.4	13.4	13.6
7 Accounts receivable, net	568.3	597.6	641.6	601.9	609.6	622.0	641.6	667.6	689.7	708.8
8 All other	290.0	312.4	337.9	329.7	340.1	313.7	337.9	363.3	373.2	368.6
9 **Total assets**	**858.3**	**910.0**	**979.5**	**931.6**	**949.7**	**935.7**	**979.5**	**1,030.8**	**1,062.9**	**1,077.4**
LIABILITIES AND CAPITAL										
10 Bank loans	19.7	24.1	26.3	22.0	22.3	24.9	26.3	24.8	25.1	27.0
11 Commercial paper	177.6	201.5	231.5	211.7	225.9	226.9	231.5	222.9	231.0	205.3
Debt										
12 Owed to parent	60.3	64.7	61.8	64.6	60.0	58.3	61.8	64.6	65.4	84.7
13 Not elsewhere classified	332.5	328.8	339.7	338.2	348.7	337.6	339.7	366.7	383.1	396.2
14 All other liabilities	174.7	189.6	203.2	193.1	188.9	185.4	203.2	220.3	226.1	216.0
15 Capital, surplus, and undivided profits	93.5	101.3	117.0	102.1	103.9	103.6	117.0	131.5	132.2	148.2
16 **Total liabilities and capital**	**858.3**	**910.0**	**979.5**	**931.6**	**949.7**	**936.6**	**979.5**	**1,030.8**	**1,062.9**	**1,077.4**

1. Includes finance company subsidiaries of bank holding companies but not of retailers and banks. Data are amounts carried on the balance sheets of finance companies; securitized pools are not shown, as they are not on the books.
2. Before deduction for unearned income and losses.

1.52 DOMESTIC FINANCE COMPANIES Owned and Managed Receivables[1]

Billions of dollars, amounts outstanding

	Type of credit	1996	1997	1998	1999 Apr.	1999 May	1999 June	1999 July	1999 Aug.	1999 Sept.
					Seasonally adjusted					
1	**Total**	**762.4**	**810.5**	**875.8**	**919.5**	**931.9**	**938.1**	**954.7**	**967.4[r]**	**973.1**
2	Consumer	307.6	327.9	352.8	364.2	369.5	372.4	375.9	380.8[r]	382.3
3	Real estate	111.9	121.1	131.4	141.2	142.8	141.2	144.2	146.7	148.9
4	Business	342.9	361.5	391.6	414.2	419.5	424.5	434.6	439.9	441.9
					Not seasonally adjusted					
5	**Total**	**769.7**	**818.1**	**884.0**	**919.4**	**931.6**	**942.9**	**948.9**	**962.2[r]**	**968.7**
6	Consumer	310.6	330.9	356.1	360.9	368.3	374.6	378.1	382.0[r]	383.5
7	Motor vehicles loans	86.7	87.0	103.1	106.8	105.1	108.6	108.5	112.7	109.4
8	Motor vehicle leases	92.5	96.8	93.3	94.8	95.3	95.6	97.0	98.3	98.1
9	Revolving[2]	32.5	38.6	32.3	31.3	31.3	32.4	32.8	33.0	30.9
10	Other[3]	33.2	34.4	33.1	32.0	32.0	32.6	32.0	31.6[r]	32.9
	Securitized assets[4]									
11	Motor vehicle loans	36.8	44.3	54.8	57.8	65.8	65.3	68.3	68.0	73.5
12	Motor vehicle leases	8.7	10.8	12.7	11.8	11.6	11.3	11.1	10.8	10.6
13	Revolving	.0	.0	8.7	8.8	8.7	9.7	9.9	9.4	10.2
14	Other	20.1	19.0	18.1	17.6	18.3	19.0	18.4	18.1	17.9
15	Real estate	111.9	121.1	131.4	141.2	142.8	141.2	144.2	146.7	148.9
16	One- to four-family	52.1	59.0	75.7	81.7	83.6	80.5	83.6	86.0	87.7
17	Other	30.5	28.9	26.6	31.6	31.5	33.0	33.1	33.7	34.6
	Securitized real estate assets[4]									
18	One- to four-family	28.9	33.0	29.0	27.6	27.4	27.5	27.2	26.8	26.5
19	Other	.4	.2	.1	.3	.3	.2	.2	.2	.2
20	Business	347.2	366.1	396.5	417.4	420.5	427.1	426.7	433.5	436.3
21	Motor vehicles	67.1	63.5	79.6	86.2	84.4	82.8	78.8	78.6	80.3
22	Retail loans	25.1	25.6	28.1	30.7	31.6	30.9	31.7	33.3	34.5
23	Wholesale loans[5]	33.0	27.7	32.8	36.5	33.8	32.7	27.9	26.8	26.8
24	Leases	9.0	10.2	18.7	18.9	19.0	19.2	19.3	18.5	19.0
25	Equipment	194.8	203.9	198.0	203.1	203.8	208.3	208.5	210.5	208.4
26	Loans	59.9	51.5	50.4	52.0	51.7	53.3	52.9	53.1	48.2
27	Leases	134.9	152.3	147.6	151.0	152.1	155.1	155.6	157.4	160.2
28	Other business receivables[6]	47.6	51.1	69.9	76.9	78.9	82.6	89.2	92.7	94.2
	Securitized assets[4]									
29	Motor vehicles	24.0	33.0	29.2	30.5	32.0	32.1	28.4	30.4	31.0
30	Retail loans	2.7	2.4	2.6	2.4	2.2	2.9	2.8	2.7	2.6
31	Wholesale loans	21.3	30.5	24.7	26.2	27.8	27.2	23.5	25.7	26.4
32	Leases	.0	.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0
33	Equipment	11.3	10.7	13.0	12.5	13.2	13.3	13.8	13.5	14.6
34	Loans	4.7	4.2	6.6	5.8	6.5	6.7	7.1	6.9	7.7
35	Leases	6.6	6.5	6.4	6.6	6.6	6.6	6.7	6.6	6.9
36	Other business receivables[6]	2.4	4.0	6.8	8.3	8.3	8.0	7.9	7.8	7.7

NOTE. This table has been revised to incorporate several changes resulting from the benchmarking of finance company receivables to the June 1996 Survey of Finance Companies. In that benchmark survey, and in the monthly surveys that have followed, more detailed breakdowns have been obtained for some components. In addition, previously unavailable data on securitized real estate loans are now included in this table. The new information has resulted in some reclassification of receivables among the three major categories (consumer, real estate, and business) and in discontinuities in some component series between May and June 1996.

Includes finance company subsidiaries of bank holding companies but not of retailers and banks. Data in this table also appear in the Board's G.20 (422) monthly statistical release. For ordering address, see inside front cover.

1. Owned receivables are those carried on the balance sheet of the institution. Managed receivables are outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator. Data are shown before deductions for unearned income and losses. Components may not sum to totals because of rounding.

2. Excludes revolving credit reported as held by depository institutions that are subsidiaries of finance companies.

3. Includes personal cash loans, mobile home loans, and loans to purchase other types of consumer goods such as appliances, apparel, boats, and recreation vehicles.

4. Outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator.

5. Credit arising from transactions between manufacturers and dealers, that is, floor plan financing.

6. Includes loans on commercial accounts receivable, factored commercial accounts, and receivable dealer capital; small loans used primarily for business or farm purposes; and wholesale and lease paper for mobile homes, campers, and travel trailers.

1.53 MORTGAGE MARKETS Mortgages on New Homes

Millions of dollars except as noted

Item	1996	1997	1998	1999						
				Apr.	May	June	July	Aug.	Sept.	Oct.
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Terms[1]										
1 Purchase price (thousands of dollars)	182.4	180.1	195.2	209.4	207.5	211.0	207.6	213.8	210.3	214.4
2 Amount of loan (thousands of dollars)	139.2	140.3	151.1	162.4	161.6	162.0	158.2	163.1	161.8	165.1
3 Loan-to-price ratio (percent)	78.2	80.4	80.0	79.5	79.8	79.0	78.6	78.3	78.8	79.0
4 Maturity (years)	27.2	28.2	28.4	28.9	28.7	28.6	28.5	28.5	29.1	29.1
5 Fees and charges (percent of loan amount)[2]	1.21	1.02	.89	.77	.69	.72	.83	.68	.64	.71
Yield (percent per year)										
6 Contract rate[1]	7.56	7.57	6.95	6.74	6.78	6.92	7.16	6.99	6.99	7.06
7 Effective rate[1,3]	7.77	7.73	7.08	6.85	6.89	7.03	7.29	7.09	7.09	7.17
8 Contract rate (HUD series)[4]	8.03	7.76	7.00	6.93	7.17	7.59	7.75	7.87	7.76	7.77
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (Section 203)[5]	8.19	7.89	7.04	7.08	7.58	8.13	8.00	8.10	8.05	8.02
10 GNMA securities[6]	7.48	7.26	6.43	6.50	6.79	7.21	7.28	7.53	7.42	7.52
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	287,052	316,678	414,515	446,025	464,530	473,315	480,651	495,302	504,938	509,990
12 FHA/VA insured	30,592	31,925	33,770	36,158	38,938	41,143	44,132	47,846	49,456	50,639
13 Conventional	256,460	284,753	380,745	409,867	425,592	432,172	436,519	447,456	455,482	459,351
14 Mortgage transactions purchased (during period)	68,618	70,465	188,448	14,225	25,640	15,934	14,004	21,094	15,200	10,057
Mortgage commitments (during period)										
15 Issued[7]	65,859	69,965	193,795	20,192	12,517	19,507	12,966	18,153	7,998	10,480
16 To sell[8]	130	1,298	1,880	75	178	351	260	478	609	1,710
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[8]										
17 Total	137,755	164,421	255,010	284,006	285,881	299,184	300,093	306,214	315,968	318,682
18 FHA/VA insured	220	177	785	1,613	1,610	1,726	1,735	1,708	1,689[r]	1,689
19 Conventional	137,535	164,244	254,225	282,393	284,271	297,458	298,358	304,506	314,279[r]	316,993
Mortgage transactions (during period)										
20 Purchases	125,103	117,401	267,402	26,473	22,503	21,950	17,602	18,674	15,238	13,323
21 Sales	119,702	114,258	250,565	25,464	21,972	20,349	16,835	17,468	14,153	12,671
22 Mortgage commitments contracted (during period)[9]	128,995	120,089	281,899	24,050	20,052	21,610	14,988	18,951	14,608	10,810

1. Weighted averages based on sample surveys of mortgages originated by major institutional lender groups for purchase of newly built homes; compiled by the Federal Housing Finance Board in cooperation with the Federal Deposit Insurance Corporation.
2. Includes all fees, commissions, discounts, and "points" paid (by the borrower or the seller) to obtain a loan.
3. Average effective interest rate on loans closed for purchase of newly built homes, assuming prepayment at the end of ten years.
4. Average contract rate on new commitments for conventional first mortgages; from U.S. Department of Housing and Urban Development (HUD). Based on transactions on the first day of the subsequent month.
5. Average gross yield on thirty-year, minimum-downpayment first mortgages insured by the Federal Housing Administration (FHA) for immediate delivery in the private secondary market. Based on transactions on first day of subsequent month.
6. Average net yields to investors on fully modified pass-through securities backed by mortgages and guaranteed by the Government National Mortgage Association (GNMA), assuming prepayment in twelve years on pools of thirty-year mortgages insured by the Federal Housing Administration or guaranteed by the Department of Veterans Affairs.
7. Does not include standby commitments issued, but includes standby commitments converted.
8. Includes participation loans as well as whole loans.
9. Includes conventional and government-underwritten loans. The Federal Home Loan Mortgage Corporation's mortgage commitments and mortgage transactions include activity under mortgage securities swap programs, whereas the corresponding data for FNMA exclude swap activity.

1.54 MORTGAGE DEBT OUTSTANDING[1]

Millions of dollars, end of period

Type of holder and property	1995	1996	1997	1998			1999	
				Q2	Q3	Q4	Q1	Q2[p]
1 **All holders**	**4,603,384**	**4,898,661**	**5,212,073**	**5,434,008**	**5,568,417**	**5,722,421**	**5,861,070**	**6,013,592**
By type of property								
2 One- to four-family residences	3,509,721	3,719,010	3,954,854	4,117,231	4,217,417	4,322,453	4,414,500	4,527,176
3 Multifamily residences	277,002	294,783	310,456	323,324	330,595	340,782	351,652	359,796
4 Nonfarm, nonresidential	732,100	797,734	856,464	900,453	926,039	962,680	997,514	1,026,903
5 Farm	84,561	87,134	90,299	93,001	94,367	96,506	97,403	99,717
By type of holder								
6 Major financial institutions	1,900,089	1,981,885	2,083,978	2,121,961	2,137,438	2,195,376	2,202,494	2,243,008
7 Commercial banks[2]	1,090,189	1,145,389	1,245,315	1,281,870	1,295,828	1,337,772	1,337,218	1,361,947
8 One- to four-family	646,545	677,603	745,510	770,116	770,340	797,533	782,441	790,465
9 Multifamily	42,521	45,451	49,670	51,227	52,205	52,871	56,170	58,572
10 Nonfarm, nonresidential	377,293	397,452	423,148	432,208	444,596	458,333	469,095	482,367
11 Farm	23,830	24,883	26,986	28,319	28,688	29,035	29,512	30,544
12 Savings institutions[3]	596,763	628,335	631,822	632,359	634,251	643,964	646,213	656,383
13 One- to four-family	482,353	513,712	520,672	522,088	525,844	533,792	534,494	544,659
14 Multifamily	61,987	61,570	59,543	58,908	56,696	56,825	56,763	55,002
15 Nonfarm, nonresidential	52,135	52,723	51,252	50,978	51,312	52,930	54,521	56,279
16 Farm	288	331	354	386	399	417	435	444
17 Life insurance companies	213,137	208,161	206,841	207,732	207,359	213,640	219,063	224,677
18 One- to four-family	8,890	6,977	7,187	6,814	6,594	6,590	6,956	7,285
19 Multifamily	28,714	30,750	30,402	30,618	30,565	31,522	31,528	32,321
20 Nonfarm, nonresidential	165,876	160,314	158,780	159,456	159,189	164,004	168,862	173,106
21 Farm	9,657	10,120	10,472	10,844	11,011	11,524	11,717	11,965
22 Federal and related agencies	308,757	295,192	286,167	287,161	287,125	292,636	288,313	288,235
23 Government National Mortgage Association	2	2	8	8	7	7	6	8
24 One- to four-family	2	2	8	8	7	7	6	8
25 Multifamily	0	0	0	0	0	0	0	0
26 Farmers Home Administration[4]	41,791	41,596	41,195	40,921	40,907	40,851	40,691	40,691
27 One- to four-family	17,705	17,303	17,253	17,059	17,025	16,895	16,777	16,777
28 Multifamily	11,617	11,685	11,720	11,722	11,736	11,739	11,731	11,731
29 Nonfarm, nonresidential	6,248	6,841	7,370	7,497	7,566	7,705	7,769	7,769
30 Farm	6,221	5,768	4,852	4,644	4,579	4,513	4,413	4,413
31 Federal Housing and Veterans' Administrations	9,809	6,244	3,821	3,631	3,405	3,674	3,675	3,684
32 One- to four-family	5,180	3,524	1,767	1,610	1,550	1,849	1,850	1,818
33 Multifamily	4,629	2,719	2,054	2,021	1,855	1,825	1,825	1,867
34 Resolution Trust Corporation	1,864	0	0	0	0	0	0	0
35 One- to four-family	691	0	0	0	0	0	0	0
36 Multifamily	647	0	0	0	0	0	0	0
37 Nonfarm, nonresidential	525	0	0	0	0	0	0	0
38 Farm	0	0	0	0	0	0	0	0
39 Federal Deposit Insurance Corporation	4,303	2,431	724	564	482	361	315	189
40 One- to four-family	492	365	109	85	72	54	47	28
41 Multifamily	428	413	123	96	82	61	54	32
42 Nonfarm, nonresidential	3,383	1,653	492	384	328	245	214	129
43 Farm	0	0	0	0	0	0	0	0
44 Federal National Mortgage Association	178,807	168,813	161,308	159,816	159,104	157,675	157,185	155,637
45 One- to four-family	163,648	155,008	149,831	149,383	149,069	147,594	147,063	145,033
46 Multifamily	15,159	13,805	11,477	10,433	10,035	10,081	10,122	10,604
47 Federal Land Banks	28,428	29,602	30,657	31,352	32,009	32,983	33,128	33,744
48 One- to four-family	1,673	1,742	1,804	1,845	1,883	1,941	1,949	1,985
49 Farm	26,755	27,860	28,853	29,507	30,126	31,042	31,179	31,758
50 Federal Home Loan Mortgage Corporation	43,753	46,504	48,454	50,869	51,211	57,085	53,313	54,282
51 One- to four-family	39,901	41,758	42,629	44,597	44,254	49,106	44,140	43,574
52 Multifamily	3,852	4,746	5,825	6,272	6,957	7,979	9,173	10,708
53 Mortgage pools or trusts[5]	1,863,210	2,064,882	2,273,022	2,442,715	2,548,301	2,632,839	2,762,770	2,861,430
54 Government National Mortgage Association	472,283	506,340	536,879	537,743	541,540	537,446	543,306	553,316
55 One- to four-family	461,438	494,158	523,225	523,400	527,043	522,498	527,912	537,407
56 Multifamily	10,845	12,182	13,654	14,343	14,497	14,948	15,395	15,909
57 Federal Home Loan Mortgage Corporation	515,051	554,260	579,385	609,791	635,726	646,459	687,179	718,085
58 One- to four-family	512,238	551,513	576,846	607,469	633,124	643,465	684,240	714,844
59 Multifamily	2,813	2,747	2,539	2,322	2,602	2,994	2,939	3,241
60 Federal National Mortgage Association	582,959	650,780	709,582	761,359	798,460	834,518	881,815	911,435
61 One- to four-family	569,724	633,210	687,981	737,631	770,979	804,205	849,513	877,863
62 Multifamily	13,235	17,570	21,601	23,728	27,481	30,313	32,302	33,572
63 Farmers Home Administration[4]	11	3	2	2	2	1	1	1
64 One- to four-family	2	0	0	0	0	0	0	0
65 Multifamily	0	0	0	0	0	0	0	0
66 Nonfarm, nonresidential	5	0	0	0	0	0	0	0
67 Farm	4	3	2	2	2	1	1	1
68 Private mortgage conduits	292,906	353,499	447,173	533,820	572,573	614,416	650,469	678,594
69 One- to four-family[6]	227,800	261,900	318,000	364,316	391,736	410,900	430,653	447,938
70 Multifamily	15,584	21,967	29,218	38,098	40,895	44,654	48,403	50,713
71 Nonfarm, nonresidential	49,522	69,633	99,955	131,406	139,942	158,862	171,413	179,942
72 Farm	0	0	0	0	0	0	0	0
73 Individuals and others[7]	531,329	556,702	568,907	582,171	595,552	601,570	607,493	620,919
74 One- to four-family	371,440	360,235	362,033	370,811	377,896	386,025	386,458	397,491
75 Multifamily	64,970	69,179	72,629	73,536	74,987	74,971	75,249	75,524
76 Nonfarm, nonresidential	77,112	109,119	115,467	118,525	123,107	120,600	125,640	127,312
77 Farm	17,806	18,169	18,779	19,299	19,562	19,974	20,147	20,592

1. Multifamily debt refers to loans on structures of five or more units.
2. Includes loans held by nondeposit trust companies but not loans held by bank trust departments.
3. Includes savings banks and savings and loan associations.
4. FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:Q4 because of accounting changes by the Farmers Home Administration.
5. Outstanding principal balances of mortgage-backed securities insured or guaranteed by the agency indicated.
6. Includes securitized home equity loans.
7. Other holders include mortgage companies, real estate investment trusts, state and local credit agencies, state and local retirement funds, noninsured pension funds, credit unions, and finance companies.

SOURCE. Based on data from various institutional and government sources. Separation of nonfarm mortgage debt by type of property, if not reported directly, and interpolations and extrapolations, when required for some quarters, are estimated in part by the Federal Reserve. Line 69 from Inside Mortgage Securities and other sources.

1.55 CONSUMER CREDIT[1]

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1996	1997	1998	1999 Apr.	May	June	July	Aug.r	Sept.
				Seasonally adjusted					
1 **Total**	**1,182,439**	**1,234,122**	**1,300,491**	**1,332,662**	**1,343,427**	**1,347,831**	**1,356,696**	**1,363,800**	**1,369,732**
2 Revolving	499,532	531,295	560,653	569,860	571,957	578,530	584,362	586,684	587,849
3 Nonrevolving[2]	682,907	702,828	739,838	762,801	771,470	769,301	772,334	777,115	781,883
				Not seasonally adjusted					
4 **Total**	**1,211,590**	**1,264,103**	**1,331,742**	**1,322,021**	**1,331,267**	**1,340,414**	**1,349,886**	**1,364,995**	**1,373,216**
By major holder									
5 Commercial banks	526,769	512,563	508,932	494,663	492,852	477,774	477,977	476,649	474,546
6 Finance companies	152,391	160,022	168,491	170,145	168,490	173,617	173,374	177,331	173,252
7 Credit unions	144,148	152,362	155,406	156,797	158,102	158,177	159,920	162,412	164,078
8 Savings institutions	44,711	47,172	51,611	54,803	55,982	57,161	58,340	59,519	60,699
9 Nonfinancial business	77,745	78,927	74,877	67,112	68,051	68,042	68,228	68,944	67,717
10 Pools of securitized assets[3]	265,826	313,057	372,425	378,501	387,790	405,643	412,047	420,140	432,924
By major type of credit[4]									
11 Revolving	522,860	555,858	586,528	563,907	566,019	572,463	576,538	582,838	584,680
12 Commercial banks	228,615	219,826	210,346	191,295	190,216	178,031	177,098	172,612	172,393
13 Finance companies	32,493	38,608	32,309	31,327	31,296	32,408	32,846	33,014	30,884
14 Credit unions	17,826	19,552	19,930	18,823	18,732	18,856	19,054	19,335	19,489
15 Savings institutions	10,313	11,441	12,450	12,507	12,641	12,775	12,909	13,043	13,177
16 Nonfinancial business	44,901	44,966	39,166	33,726	34,446	34,618	34,794	35,418	34,289
17 Pools of securitized assets[3]	188,712	221,465	272,327	276,229	278,688	295,775	299,837	309,416	314,448
18 Nonrevolving	688,730	708,245	745,214	758,114	765,248	767,951	773,348	782,157	788,536
19 Commercial banks	298,154	292,737	298,586	303,368	302,636	299,743	300,879	304,037	302,153
20 Finance companies	119,898	121,414	136,182	138,818	137,194	141,209	140,528	144,317	142,368
21 Credit unions	126,322	132,810	135,476	137,974	139,370	139,321	140,866	143,077	144,589
22 Savings institutions	34,398	35,731	39,161	42,296	43,341	44,386	45,431	46,476	47,522
23 Nonfinancial business	32,844	33,961	35,711	33,386	33,605	33,424	33,434	33,526	33,428
24 Pools of securitized assets[3]	77,114	91,592	100,098	102,272	109,102	109,868	112,210	110,724	118,476

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.
2. Comprises motor vehicle loans, mobile home loans, and all other loans that are not included in revolving credit, such as loans for education, boats, trailers, or vacations. These loans may be secured or unsecured.
3. Outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator.
4. Totals include estimates for certain holders for which only consumer credit totals are available.

1.56 TERMS OF CONSUMER CREDIT[1]

Percent per year except as noted

Item	1996	1997	1998	1999 Mar.	Apr.	May	June	July	Aug.	Sept.
INTEREST RATES										
Commercial banks[2]										
1 48-month new car	9.05	9.02	8.72	n.a.	n.a.	8.30	n.a.	n.a.	8.44	n.a.
2 24-month personal	13.54	13.90	13.74	n.a.	n.a.	13.26	n.a.	n.a.	13.38	n.a.
Credit card plan										
3 All accounts	15.63	15.77	15.71	n.a.	n.a.	15.21	n.a.	n.a.	15.08	n.a.
4 Accounts assessed interest	15.50	15.57	15.59	n.a.	n.a.	14.94	n.a.	n.a.	14.79	n.a.
Auto finance companies										
5 New car	9.84	7.12	6.30	6.31	6.52	6.57	6.60	6.70	6.28	n.a.
6 Used car	13.53	13.27	12.64	12.09	12.17	12.16	12.31	12.69	12.96	n.a.
OTHER TERMS[3]										
Maturity (months)										
7 New car	51.6	54.1	52.1	53.0	52.8	52.4	52.3	52.0	51.7	52.1
8 Used car	51.4	51.0	53.5	56.0	56.0	56.1	56.0	56.1	55.8	55.9
Loan-to-value ratio										
9 New car	91	92	92	91	92	92	92	92	92	92
10 Used car	100	99	99	99	99	99	99	99r	100	100
Amount financed (dollars)										
11 New car	16,987	18,077	19,083	19,339	19,435	19,539	19,722	19,873r	20,012	20,154
12 Used car	12,182	12,281	12,691	13,653	13,647	13,700	13,816	13,609r	13,374	13,449

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.
2. Data are available for only the second month of each quarter.
3. At auto finance companies.

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]

Billions of dollars; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1993	1994	1995	1996	1997	1997	1998				1999	
						Q4	Q1	Q2	Q3	Q4	Q1	Q2
							Nonfinancial sectors					
1 **Total net borrowing by domestic nonfinancial sectors**	**584.4**	**575.8**	**720.4**	**743.0**	**785.3**	**912.0**	**1,075.5**	**1,042.4**	**899.2**	**1,072.8**	**1,248.1**	**865.6**
By sector and instrument												
2 Federal government	256.1	155.8	144.4	145.0	23.1	−5.5	−14.5	−28.4	−113.5	−54.1	−75.2	−112.2
3 Treasury securities	248.3	155.7	142.9	146.6	23.2	−7.3	−12.1	−26.9	−113.1	−66.3	−73.7	−112.8
4 Budget agency securities and mortgages	7.8	.2	1.5	−1.6	−.1	1.7	−2.4	−1.4	−.4	12.2	−1.5	.6
5 Nonfederal	328.3	420.0	576.0	598.0	762.2	917.5	1,090.0	1,070.8	1,012.6	1,127.0	1,323.3	977.8
By instrument												
6 Commercial paper	10.0	21.4	18.1	−.9	13.7	12.8	51.1	3.8	85.6	−43.0	64.4	3.4
7 Municipal securities and loans	74.8	−35.9	−48.2	2.6	71.4	99.9	113.5	101.3	82.9	89.6	100.7	48.0
8 Corporate bonds	75.2	23.3	91.1	116.3	150.5	163.6	278.8	294.8	108.0	193.2	274.0	260.8
9 Bank loans n.e.c.	6.4	75.2	103.7	70.5	106.5	178.1	35.0	169.2	107.8	120.9	70.0	21.8
10 Other loans and advances	−18.9	34.0	67.2	33.5	69.1	141.4	76.3	40.8	77.7	102.5	114.1	−5.3
11 Mortgages	122.4	177.0	205.1	287.4	298.4	278.6	476.4	398.9	471.1	593.8	573.4	595.7
12 Home	160.1	183.4	179.8	243.0	235.8	188.8	376.5	287.3	373.7	427.8	414.6	424.2
13 Multifamily residential	−5.1	−2.1	7.6	11.5	10.8	18.3	21.6	21.1	16.1	30.6	35.9	36.8
14 Commercial	−33.6	−6.5	16.2	30.4	48.7	68.6	74.1	83.8	75.9	126.8	119.3	125.4
15 Farm	1.0	2.2	1.6	2.6	3.2	2.9	4.1	6.7	5.5	8.6	3.6	9.3
16 Consumer credit	58.4	124.9	138.9	88.8	52.5	43.1	58.9	62.1	79.6	69.9	126.6	53.2
By borrowing sector												
17 Household	209.4	316.3	350.3	351.7	325.5	311.1	463.3	418.5	471.9	527.3	553.3	511.0
18 Nonfinancial business	52.7	150.0	277.2	253.2	380.6	520.3	532.5	570.3	470.7	524.6	682.6	431.1
19 Corporate	46.9	142.3	243.7	164.6	297.0	425.0	426.9	467.4	365.8	413.7	574.4	320.6
20 Nonfarm noncorporate	3.2	3.3	30.6	83.8	77.4	86.6	97.1	95.4	97.6	103.3	101.6	111.2
21 Farm	2.6	4.4	2.9	4.8	6.2	8.6	8.4	7.5	7.3	7.5	6.6	−.7
22 State and local government	66.2	−46.2	−51.5	−6.8	56.1	86.2	94.2	82.0	70.0	75.1	87.4	35.7
23 Foreign net borrowing in United States	69.8	−13.9	71.1	77.2	57.6	44.8	95.0	97.9	−19.6	−38.9	17.3	−43.3
24 Commercial paper	−9.6	−26.1	13.5	11.3	3.7	.7	55.3	−25.5	6.2	−4.7	18.3	−27.1
25 Bonds	82.9	12.2	49.7	55.8	47.2	34.2	42.5	119.2	−27.2	−34.2	.9	−19.1
26 Bank loans n.e.c.	.7	1.4	8.5	9.1	8.5	15.7	5.2	8.4	3.6	9.8	.9	5.7
27 Other loans and advances	−4.2	−1.4	−.5	1.0	−1.8	−5.8	−8.0	−4.2	−2.2	−9.7	−2.8	−2.7
28 **Total domestic plus foreign**	**654.2**	**561.9**	**791.5**	**820.3**	**842.9**	**956.8**	**1,170.4**	**1,140.3**	**879.5**	**1,034.0**	**1,265.4**	**822.4**
							Financial sectors					
29 **Total net borrowing by financial sectors**	**294.4**	**468.4**	**453.9**	**548.9**	**652.2**	**961.5**	**931.3**	**988.9**	**1,056.3**	**1,298.7**	**1,216.0**	**1,014.1**
By instrument												
30 Federal government-related	165.3	287.5	204.1	231.5	212.8	290.9	249.2	405.4	555.8	673.3	592.3	579.3
31 Government-sponsored enterprise securities	80.6	176.9	105.9	90.4	98.4	157.9	142.5	166.4	294.0	510.5	193.0	304.7
32 Mortgage pool securities	84.7	115.4	98.2	141.1	114.5	133.0	106.7	239.0	261.7	162.8	399.3	274.6
33 Loans from U.S. government	.0	−4.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	129.1	180.9	249.8	317.5	439.4	670.7	682.1	583.5	500.5	625.4	623.7	434.8
35 Open market paper	−5.5	40.5	42.7	92.2	166.7	244.7	236.7	135.6	141.0	130.7	78.3	57.8
36 Corporate bonds	123.1	121.8	195.9	176.9	209.0	348.8	346.3	361.8	177.4	281.9	492.5	260.8
37 Bank loans n.e.c.	−14.4	−13.7	2.5	12.6	13.2	−4.7	57.3	−9.7	60.2	12.4	−8.8	10.5
38 Other loans and advances	22.4	22.6	3.4	27.9	35.6	61.7	32.7	76.0	82.3	169.9	41.6	117.9
39 Mortgages	3.6	9.8	5.3	7.9	14.9	20.1	9.1	19.9	39.6	30.6	20.1	−12.3
By borrowing sector												
40 Commercial banking	13.4	20.1	22.5	13.0	46.1	61.4	82.8	80.8	61.7	66.3	31.1	61.6
41 Savings institutions	11.3	12.8	2.6	25.5	19.7	41.7	10.6	31.2	63.7	103.2	58.0	58.6
42 Credit unions	.2	.2	−.1	.1	.1	.3	.5	.2	1.0	.4	1.5	1.4
43 Life insurance companies	.2	.3	−.1	1.1	.2	−.3	.0	−.6	1.6	1.8	3.3	3.0
44 Government-sponsored enterprises	80.6	172.1	105.9	90.4	98.4	157.9	142.5	166.4	294.0	510.5	193.0	304.7
45 Federally related mortgage pools	84.7	115.4	98.2	141.1	114.5	133.0	106.7	239.0	261.7	162.8	399.3	274.6
46 Issuers of asset-backed securities (ABSs)	85.4	76.5	142.4	153.9	200.7	374.8	283.0	352.4	294.2	335.7	302.2	318.3
47 Finance companies	−1.4	48.7	50.2	45.9	48.7	70.7	74.6	91.9	−12.0	17.8	71.2	88.4
48 Mortgage companies	.0	−11.5	−2.2	4.1	−4.6	−46.8	29.4	−28.2	2.3	3.0	−4.6	5.1
49 Real estate investment trusts (REITs)	1.7	10.2	4.5	11.9	39.6	66.0	63.1	64.4	79.3	44.0	25.6	−19.7
50 Brokers and dealers	12.0	.5	−5.0	−2.0	8.1	7.0	−1.0	20.0	−2.6	12.4	−31.1	−18.3
51 Funding corporations	6.3	23.1	34.9	64.1	80.7	95.9	139.2	−28.6	11.2	40.9	166.5	−63.4

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]—Continued

Transaction category or sector	1993	1994	1995	1996	1997	1997	1998				1999	
						Q4	Q1	Q2	Q3	Q4	Q1	Q2
	All sectors											
52 **Total net borrowing, all sectors**	**948.6**	**1,030.3**	**1,245.4**	**1,369.2**	**1,495.1**	**1,918.3**	**2,101.7**	**2,129.3**	**1,935.8**	**2,332.7**	**2,481.3**	**1,836.4**
53 Open market paper	−5.1	35.7	74.3	102.6	184.1	258.2	343.0	113.8	232.7	83.0	161.1	34.1
54 U.S. government securities	421.4	448.1	348.5	376.5	235.9	285.3	234.7	377.1	442.3	619.1	517.1	467.1
55 Municipal securities	74.8	−35.9	−48.2	2.6	71.4	99.9	113.5	101.3	82.9	89.6	100.7	48.0
56 Corporate and foreign bonds	281.2	157.3	336.7	348.9	406.7	546.5	667.6	775.8	258.2	440.9	767.4	502.5
57 Bank loans n.e.c.	−7.2	62.9	114.7	92.1	128.2	189.2	97.6	167.9	171.6	143.0	62.1	38.0
58 Other loans and advances	−.8	50.4	70.1	62.5	102.8	197.4	101.0	112.5	157.8	262.7	152.9	110.0
59 Mortgages	126.0	186.8	210.5	295.3	313.3	298.7	485.5	418.7	510.7	624.4	593.5	583.5
60 Consumer credit	58.4	124.9	138.9	88.8	52.5	43.1	58.9	62.1	79.6	69.9	126.6	53.2
	Funds raised through mutual funds and corporate equities											
61 **Total net issues**	**429.7**	**125.2**	**144.3**	**228.9**	**188.4**	**160.9**	**213.5**	**268.5**	**−147.2**	**18.3**	**140.6**	**6.4**
62 Corporate equities	137.7	24.6	−3.1	−8.6	−76.7	−100.0	−108.8	−109.3	−320.6	−206.5	−114.7	−241.5
63 Nonfinancial corporations	21.3	−44.9	−58.3	−69.5	−114.4	−143.3	−139.2	129.1	308.4	−491.3	−65.7	−354.0
64 Foreign shares purchased by U.S. residents	63.4	48.1	50.4	60.0	42.0	1.7	14.0	12.3	−32.8	317.4	−33.4	124.7
65 Financial corporations	53.0	21.4	4.8	.8	−4.3	41.6	16.4	7.5	20.5	−32.7	−15.6	−12.2
66 Mutual fund shares	292.0	100.6	147.4	237.6	265.1	260.9	322.3	377.8	173.4	224.8	255.3	247.9

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.2 through F.4. For ordering address, see inside front cover.

1.58 SUMMARY OF FINANCIAL TRANSACTIONS[1]

Billions of dollars except as noted; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1993	1994	1995	1996	1997	1997	1998				1999	
						Q4	Q1	Q2	Q3	Q4	Q1	Q2
NET LENDING IN CREDIT MARKETS[2]												
1 **Total net lending in credit markets**	**948.6**	**1,030.3**	**1,245.4**	**1,369.2**	**1,495.1**	**1,918.3**	**2,101.7**	**2,129.3**	**1,935.8**	**2,332.7**	**2,481.3**	**1,836.4**
2 Domestic nonfederal nonfinancial sectors	30.0	231.2	−90.0	22.5	−88.9	48.1	−49.7	512.7	94.9	−318.3	307.5	347.9
3 Household	−10.6	268.0	5.5	61.4	−86.2	7.5	−64.2	385.2	−44.8	−424.1	244.9	255.1
4 Nonfinancial corporate business	9.1	17.7	−8.8	−.8	−2.3	−13.0	8.4	−46.9	14.0	14.1	10.4	39.5
5 Nonfarm noncorporate business	−1.1	.6	4.7	−4.3	−.6	−.6	.0	.0	.0	.0	.0	.0
6 State and local governments	32.6	−55.0	−91.4	−33.7	.1	54.2	6.1	174.3	125.7	91.7	52.2	53.3
7 Federal government	−18.4	−27.4	−.2	−7.4	5.1	9.2	15.7	12.9	13.8	11.7	17.5	6.5
8 Rest of the world	129.3	132.3	273.9	414.4	310.7	203.9	223.8	321.8	60.8	390.7	213.3	51.6
9 Financial sectors	807.8	694.1	1,061.7	939.7	1,268.1	1,657.1	1,912.0	1,281.9	1,766.3	2,248.6	1,943.0	1,430.5
10 Monetary authority	36.2	31.5	12.7	12.3	38.3	54.3	27.6	11.5	41.6	3.5	71.8	62.4
11 Commercial banking	142.2	163.4	265.9	187.5	324.3	447.4	306.7	132.7	250.1	531.5	68.9	135.0
12 U.S.-chartered banks	149.6	148.1	186.5	119.6	274.9	357.6	268.4	130.0	309.2	540.2	134.1	231.5
13 Foreign banking offices in United States	−9.8	11.2	75.4	63.3	40.2	69.3	17.5	15.2	−68.1	−12.1	−54.9	−105.8
14 Bank holding companies	.0	.9	−.3	3.9	5.4	19.4	15.3	−17.6	6.0	−7.4	−6.0	.1
15 Banks in U.S.-affiliated areas	2.4	3.3	4.2	.7	3.7	1.1	5.5	5.1	2.9	10.7	−4.4	9.2
16 Savings institutions	−23.3	6.7	−7.6	19.9	−4.7	8.9	11.8	2.1	17.9	113.3	102.7	88.8
17 Credit unions	21.7	28.1	16.2	25.5	16.8	6.5	16.1	22.7	21.0	16.0	37.7	34.7
18 Bank personal trusts and estates	9.5	7.1	−8.3	−7.7	7.6	8.8	2.4	3.1	2.0	3.9	3.1	2.2
19 Life insurance companies	100.4	72.0	100.0	69.6	94.3	34.1	92.1	63.4	65.6	86.0	72.6	89.0
20 Other insurance companies	27.7	24.9	21.5	22.5	25.2	34.7	23.4	−1.5	−7.7	67.5	−19.7	5.0
21 Private pension funds	50.2	46.1	56.0	52.3	65.5	79.5	74.5	130.1	95.6	174.4	60.5	150.0
22 State and local government retirement funds	24.7	30.9	33.6	37.3	63.8	42.7	67.4	78.4	65.6	48.5	74.3	37.4
23 Money market mutual funds	20.4	30.0	86.5	88.8	87.5	141.8	159.3	208.1	255.5	353.1	227.6	−92.6
24 Mutual funds	159.5	−7.1	52.5	48.9	80.9	64.8	156.4	146.4	92.9	103.5	101.5	98.8
25 Closed-end funds	20.0	−3.7	10.5	4.7	−2.9	−2.9	4.5	4.5	4.5	4.5	4.4	4.4
26 Government-sponsored enterprises	87.8	117.8	86.7	84.2	94.3	158.1	198.3	150.6	264.7	429.5	157.2	259.5
27 Federally related mortgage pools	84.7	115.4	98.2	141.1	114.5	133.0	106.7	239.0	261.7	162.8	399.3	274.6
28 Asset-backed securities issuers (ABSs)	82.8	69.4	120.6	123.6	162.3	321.9	223.9	321.4	248.7	312.7	284.6	301.5
29 Finance companies	−20.9	48.3	49.9	18.4	21.9	−19.7	28.7	24.0	79.5	75.3	92.2	79.6
30 Mortgage companies	.0	−24.0	−3.4	8.2	−9.1	−93.6	58.8	−56.4	4.5	6.0	−9.1	10.2
31 Real estate investment trusts (REITs)	.4	−.7	1.4	4.4	20.2	38.9	25.6	6.1	−11.3	−40.8	1.7	−2.2
32 Brokers and dealers	14.8	−44.2	90.1	−15.7	14.9	71.7	245.8	−183.1	77.0	−209.1	184.5	−204.5
33 Funding corporations	−31.0	−17.8	−21.2	14.0	52.7	126.2	82.0	−21.4	−63.3	6.4	27.1	96.8
RELATION OF LIABILITIES TO FINANCIAL ASSETS												
34 **Net flows through credit markets**	**948.6**	**1,030.3**	**1,245.4**	**1,369.2**	**1,495.1**	**1,918.3**	**2,101.7**	**2,129.3**	**1,935.8**	**2,332.7**	**2,481.3**	**1,836.4**
Other financial sources												
35 Official foreign exchange	.8	−5.8	8.8	−6.3	.7	17.5	1.0	8.1	8.9	8.6	−14.0	−5.4
36 Special drawing rights certificates	.0	.0	2.2	−.5	−.5	.0	.0	.0	.0	.0	−4.0	.0
37 Treasury currency	.4	.7	.6	.1	.0	−1.9	.3	.2	1.7	−2.3	.0	.7
38 Foreign deposits	−18.5	52.9	35.3	85.9	106.8	100.6	−46.5	92.9	84.9	−131.9	127.7	114.5
39 Net interbank transactions	50.5	89.8	10.0	−51.6	−19.7	54.3	−95.2	39.8	44.2	−122.9	49.1	68.2
40 Checkable deposits and currency	117.3	−9.7	−12.7	15.8	41.5	72.1	52.6	90.1	−24.9	72.8	61.7	10.3
41 Small time and savings deposits	−70.3	−39.9	96.6	97.2	97.1	136.7	99.0	84.9	144.7	281.2	−63.8	104.0
42 Large time deposits	−23.5	19.6	65.6	114.0	122.5	59.2	187.8	−5.6	81.8	104.4	−5.9	42.6
43 Money market fund shares	20.2	43.3	142.3	145.8	157.6	149.9	213.6	247.2	367.9	313.1	204.9	100.5
44 Security repurchase agreements	71.3	78.2	110.5	41.4	120.9	103.3	250.3	−100.8	231.1	−170.3	408.2	−65.6
45 Corporate equities	137.7	24.6	−3.1	−8.6	−76.7	−100.0	−108.8	−109.3	−320.6	−206.5	−114.7	−241.5
46 Mutual fund shares	292.0	100.6	147.4	237.6	265.1	260.9	322.3	377.8	173.4	224.8	255.3	247.9
47 Trade payables	52.2	94.0	101.6	86.1	96.2	122.6	108.3	−57.4	34.6	−86.8	155.5	98.4
48 Security credit	61.4	−.1	26.7	52.4	111.0	128.0	159.3	134.3	167.0	−27.2	−86.9	89.3
49 Life insurance reserves	37.1	35.5	45.8	44.5	54.3	37.4	49.3	53.3	51.7	59.0	40.8	65.9
50 Pension fund reserves	268.0	254.7	235.1	246.9	304.0	304.1	294.7	272.9	279.5	313.8	284.3	316.4
51 Taxes payable	11.4	2.6	6.2	16.0	16.8	3.9	12.2	.9	27.3	11.7	−10.3	27.2
52 Investment in bank personal trusts	.9	17.8	4.0	−8.6	75.0	78.4	50.3	57.5	47.8	67.1	64.1	53.0
53 Noncorporate proprietors' equity	24.1	53.6	60.3	−.6	6.1	−43.5	−11.0	−5.4	−61.2	3.2	−2.5	12.3
54 Miscellaneous	356.0	245.6	444.6	498.3	513.3	222.2	980.1	376.5	712.6	702.0	238.7	1,092.8
55 **Total financial sources**	**2,337.6**	**2,088.3**	**2,773.2**	**2,975.1**	**3,487.1**	**3,624.1**	**4,621.2**	**3,687.3**	**3,988.1**	**3,746.3**	**4,069.6**	**3,968.0**
Liabilities not identified as assets (−)												
56 Treasury currency	−.2	−.2	−.5	−.9	−.6	−2.4	−.2	−.3	1.1	−3.4	−1.5	−.4
57 Foreign deposits	−5.7	43.0	25.1	59.6	106.8	145.5	−95.7	119.9	69.9	−156.5	62.0	73.5
58 Net interbank liabilities	4.2	−2.7	−3.1	−3.3	−19.9	−38.1	35.1	8.9	22.3	−52.8	58.7	−1.7
59 Security repurchase agreements	50.5	67.7	20.2	4.5	62.3	185.1	120.8	−170.0	110.2	.2	362.2	−14.8
60 Taxes payable	15.8	16.6	21.1	20.4	18.8	14.4	9.4	2.8	24.2	17.4	−22.4	−15.0
61 Miscellaneous	−158.5	−160.1	−221.4	−66.9	−254.9	−640.7	61.0	−225.9	−106.7	−43.9	−568.0	−390.0
Floats not included in assets (−)												
62 Federal government checkable deposits	−1.5	−4.8	−6.0	.5	−2.7	−10.0	8.3	−44.4	32.4	14.0	−1.8	−41.4
63 Other checkable deposits	−1.3	−2.8	−3.8	−4.0	−3.9	−5.0	−4.0	−2.9	−3.6	−1.8	−1.9	−1.0
64 Trade credit	−4.0	1.5	−11.7	−49.9	3.6	15.7	41.9	−150.7	−94.5	−31.1	55.7	−6.9
65 **Total identified to sectors as assets**	**2,438.2**	**2,130.1**	**2,953.4**	**3,015.2**	**3,577.6**	**3,959.6**	**4,444.8**	**4,150.0**	**3,932.8**	**4,004.0**	**4,126.5**	**4,365.7**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.1 and F.5. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

1.59 SUMMARY OF CREDIT MARKET DEBT OUTSTANDING[1]

Billions of dollars, end of period

Transaction category or sector	1994	1995	1996	1997	1997	1998				1999	
					Q4	Q1	Q2	Q3	Q4	Q1	Q2
	Nonfinancial sectors										
1 **Total credit market debt owed by domestic nonfinancial sectors**	**13,013.9**	**13,734.3**	**14,477.4**	**15,261.1**	**15,261.1**	**15,522.2**	**15,742.1**	**15,956.2**	**16,283.6**	**16,588.0**	**16,758.7**
By sector and instrument											
2 Federal government	3,492.3	3,636.7	3,781.8	3,804.9	3,804.9	3,830.8	3,749.0	3,720.2	3,752.2	3,759.7	3,651.7
3 Treasury securities	3,465.6	3,608.5	3,755.1	3,778.3	3,778.3	3,804.8	3,723.4	3,694.7	3,723.7	3,731.6	3,623.4
4 Budget agency securities and mortgages	26.7	28.2	26.6	26.5	26.5	25.9	25.6	25.5	28.5	28.1	28.3
5 Nonfederal	9,521.6	10,097.6	10,695.6	11,456.3	11,456.3	11,691.4	11,993.2	12,236.0	12,531.4	12,828.3	13,107.0
By instrument											
6 Commercial paper	139.2	157.4	156.4	168.6	168.6	193.1	202.5	216.9	193.0	223.9	232.4
7 Municipal securities and loans	1,341.7	1,293.5	1,296.0	1,367.5	1,367.5	1,397.1	1,429.3	1,439.9	1,464.3	1,491.0	1,510.0
8 Corporate bonds	1,253.0	1,344.1	1,460.4	1,610.9	1,610.9	1,680.6	1,754.3	1,781.3	1,829.6	1,898.1	1,963.3
9 Bank loans n.e.c.	759.9	863.6	934.1	1,040.5	1,040.5	1,047.9	1,097.6	1,120.6	1,148.8	1,165.2	1,178.4
10 Other loans and advances	669.6	736.9	770.4	839.5	839.5	863.5	873.1	886.8	913.8	947.5	945.8
11 Mortgages	4,374.2	4,579.4	4,866.8	5,165.2	5,165.2	5,273.3	5,379.7	5,504.0	5,650.3	5,784.1	5,939.2
12 Home	3,330.0	3,509.8	3,719.0	3,954.8	3,954.8	4,037.9	4,116.4	4,216.4	4,321.1	4,413.8	4,526.0
13 Multifamily residential	261.5	269.1	284.3	295.0	295.0	300.4	305.7	309.7	317.4	326.6	335.8
14 Commercial	699.8	716.0	776.4	825.1	825.1	843.6	864.6	883.6	915.3	946.3	977.7
15 Farm	83.0	84.6	87.1	90.3	90.3	91.3	93.0	94.4	96.5	97.4	99.7
16 Consumer credit	983.9	1,122.8	1,211.6	1,264.1	1,264.1	1,236.0	1,256.8	1,286.6	1,331.7	1,318.6	1,338.0
By borrowing sector											
17 Household	4,427.0	4,782.2	5,105.1	5,433.3	5,433.3	5,494.5	5,613.2	5,746.1	5,903.6	5,985.9	6,128.1
18 Nonfinancial business	3,972.9	4,245.2	4,527.1	4,903.5	4,903.5	5,052.6	5,209.2	5,311.1	5,428.0	5,619.2	5,740.7
19 Corporate	2,708.9	2,947.7	3,141.0	3,433.8	3,433.8	3,559.4	3,686.4	3,762.5	3,852.2	4,019.2	4,107.9
20 Nonfarm noncorporate	1,121.8	1,152.4	1,236.1	1,313.6	1,313.6	1,337.9	1,361.8	1,385.5	1,411.9	1,437.6	1,466.7
21 Farm	142.2	145.1	149.9	156.1	156.1	155.3	161.0	163.1	163.8	162.4	166.2
22 State and local government	1,121.7	1,070.2	1,063.4	1,119.5	1,119.5	1,144.3	1,170.8	1,178.8	1,199.8	1,223.2	1,238.2
23 **Foreign credit market debt held in United States**	**370.3**	**441.4**	**518.7**	**570.1**	**570.1**	**591.6**	**617.1**	**612.8**	**603.7**	**607.8**	**596.5**
24 Commercial paper	42.7	56.2	67.5	65.1	65.1	76.7	71.4	74.0	72.9	77.2	70.1
25 Bonds	242.3	291.9	347.7	394.9	394.9	405.6	435.4	428.6	420.0	420.2	415.4
26 Bank loans n.e.c.	26.1	34.6	43.7	52.1	52.1	53.4	55.5	56.4	58.9	59.1	60.5
27 Other loans and advances	59.3	58.8	59.8	58.0	58.0	55.9	54.8	53.8	52.0	51.3	50.4
28 **Total credit market debt owed by nonfinancial sectors, domestic and foreign**	**13,384.2**	**14,175.8**	**14,996.0**	**15,831.2**	**15,831.2**	**16,113.8**	**16,359.2**	**16,568.9**	**16,887.3**	**17,195.8**	**17,355.2**
	Financial sectors										
29 **Total credit market debt owed by financial sectors**	**3,822.2**	**4,278.8**	**4,827.7**	**5,446.8**	**5,446.8**	**5,670.1**	**5,926.8**	**6,195.5**	**6,515.6**	**6,809.7**	**7,073.6**
By instrument											
30 Federal government-related	2,172.7	2,376.8	2,608.3	2,821.1	2,821.1	2,878.0	2,981.4	3,121.7	3,292.0	3,434.1	3,580.8
31 Government-sponsored enterprise securities	700.6	806.5	896.9	995.3	995.3	1,030.9	1,072.5	1,146.0	1,273.6	1,321.8	1,398.0
32 Mortgage pool securities	1,472.1	1,570.3	1,711.4	1,825.8	1,825.8	1,847.1	1,908.9	1,975.7	2,018.4	2,112.3	2,182.8
33 Loans from U.S. government	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	1,649.5	1,901.9	2,219.4	2,625.7	2,625.7	2,792.1	2,945.4	3,073.8	3,223.6	3,375.6	3,492.7
35 Open market paper	441.6	486.9	579.1	745.7	745.7	804.9	838.9	874.2	906.7	926.4	940.9
36 Corporate bonds	1,008.8	1,204.7	1,381.5	1,557.5	1,557.5	1,640.8	1,738.7	1,786.2	1,849.4	1,969.3	2,042.9
37 Bank loans n.e.c.	48.9	51.4	64.0	77.2	77.2	90.6	88.2	103.2	107.2	104.1	106.8
38 Other loans and advances	131.6	135.0	162.9	198.5	198.5	206.6	225.6	246.2	288.7	299.1	328.6
39 Mortgages	18.7	24.1	31.9	46.8	46.8	49.1	54.1	64.0	71.6	76.6	73.6
By borrowing sector											
40 Commercial banks	94.5	102.6	113.6	140.6	140.6	148.7	159.6	169.6	188.6	187.5	202.7
41 Bank holding companies	133.6	148.0	150.0	168.6	168.6	181.2	190.5	196.1	193.5	202.6	202.7
42 Savings institutions	112.4	115.0	140.5	160.3	160.3	162.9	170.7	186.6	212.4	226.9	241.6
43 Credit unions	.5	.4	.4	.6	.6	.7	.8	1.0	1.1	1.5	1.8
44 Life insurance companies	.6	.5	1.6	1.8	1.8	1.8	1.6	2.0	2.5	3.3	4.0
45 Government-sponsored enterprises	700.6	806.5	896.9	995.3	995.3	1,030.9	1,072.5	1,146.0	1,273.6	1,321.8	1,398.0
46 Federally related mortgage pools	1,472.1	1,570.3	1,711.4	1,825.8	1,825.8	1,847.1	1,908.9	1,975.7	2,018.4	2,112.3	2,182.8
47 Issuers of asset-backed securities (ABSs)	570.1	712.5	866.4	1,078.2	1,078.2	1,142.9	1,230.4	1,307.0	1,394.6	1,463.8	1,542.9
48 Brokers and dealers	34.3	29.3	27.3	35.3	35.3	35.1	40.1	39.4	42.5	34.8	30.2
49 Finance companies	433.7	483.9	529.8	554.5	554.5	571.9	596.9	589.4	597.5	614.4	639.2
50 Mortgage companies	18.7	16.5	20.6	16.0	16.0	23.4	16.3	16.9	17.7	16.5	17.8
51 Real estate investment trusts (REITs)	40.0	44.6	56.5	96.1	96.1	111.9	128.0	147.8	158.8	165.2	160.3
52 Funding corporations	211.0	248.6	312.7	373.7	373.7	411.6	410.5	417.9	414.4	459.1	449.6
	All sectors										
53 **Total credit market debt, domestic and foreign**	**17,206.4**	**18,454.5**	**19,823.7**	**21,278.1**	**21,278.1**	**21,783.9**	**22,286.0**	**22,764.5**	**23,402.9**	**24,005.5**	**24,428.7**
54 Open market paper	623.5	700.4	803.0	979.4	979.4	1,074.8	1,112.7	1,165.1	1,172.6	1,227.6	1,243.3
55 U.S. government securities	5,665.0	6,013.6	6,390.0	6,626.0	6,626.0	6,708.7	6,730.3	6,841.9	7,044.3	7,193.8	7,232.5
56 Municipal securities	1,341.7	1,293.5	1,296.0	1,367.5	1,367.5	1,397.1	1,429.3	1,439.9	1,464.3	1,491.0	1,510.0
57 Corporate and foreign bonds	2,504.0	2,840.7	3,189.6	3,563.3	3,563.3	3,727.0	3,928.3	3,996.0	4,098.9	4,287.6	4,421.6
58 Bank loans n.e.c.	834.9	949.6	1,041.7	1,169.8	1,169.8	1,191.9	1,241.3	1,280.3	1,314.9	1,328.3	1,345.6
59 Other loans and advances	860.5	930.6	993.1	1,095.9	1,095.9	1,126.1	1,153.6	1,186.8	1,254.4	1,297.8	1,324.8
60 Mortgages	4,393.0	4,603.4	4,898.7	5,212.0	5,212.0	5,322.4	5,433.7	5,568.0	5,721.9	5,860.7	6,012.7
61 Consumer credit	983.9	1,122.8	1,211.6	1,264.1	1,264.1	1,236.0	1,256.8	1,286.6	1,331.7	1,318.6	1,338.0

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.2 through L.4. For ordering address, see inside front cover.

1.60 SUMMARY OF FINANCIAL ASSETS AND LIABILITIES[1]

Billions of dollars except as noted, end of period

Transaction category or sector	1994	1995	1996	1997	1997	1998				1999	
					Q4	Q1	Q2	Q3	Q4	Q1	Q2
CREDIT MARKET DEBT OUTSTANDING[2]											
1 **Total credit market assets**	**17,206.4**	**18,454.5**	**19,823.7**	**21,278.1**	**21,278.1**	**21,783.9**	**22,286.0**	**22,764.5**	**23,402.9**	**24,005.5**	**24,428.7**
2 Domestic nonfederal nonfinancial sectors	2,988.8	2,856.8	2,924.6	2,781.4	2,781.4	2,761.2	2,847.0	2,876.6	2,813.0	2,875.4	2,915.9
3 Household	1,932.1	1,895.5	2,011.6	1,871.1	1,871.1	1,868.2	1,919.2	1,913.4	1,805.8	1,874.9	1,889.2
4 Nonfinancial corporate business	289.2	280.4	270.2	268.0	268.0	249.6	238.7	244.7	265.4	246.1	257.0
5 Nonfarm noncorporate business	37.6	42.3	38.0	37.4	37.4	37.4	37.4	37.4	37.4	37.4	37.4
6 State and local governments	729.9	638.6	604.8	605.0	605.0	606.0	651.6	681.1	704.4	717.1	732.3
7 Federal government	202.9	202.7	195.3	200.4	200.4	204.3	207.5	210.9	213.9	218.3	219.9
8 Rest of the world	1,216.0	1,531.1	1,926.6	2,256.8	2,256.8	2,317.1	2,396.0	2,412.2	2,534.3	2,591.8	2,603.3
9 Financial sectors	12,798.8	13,863.9	14,777.2	16,039.5	16,039.5	16,501.3	16,835.5	17,264.8	17,841.7	18,320.0	18,689.7
10 Monetary authority	368.2	380.8	393.1	431.4	431.4	433.8	440.3	446.5	452.5	466.0	485.1
11 Commercial banking	3,254.3	3,520.1	3,707.7	4,031.9	4,031.9	4,093.4	4,136.4	4,195.7	4,335.7	4,338.4	4,383.3
12 U.S.-chartered banks	2,869.6	3,056.1	3,175.8	3,450.7	3,450.7	3,505.1	3,543.6	3,616.2	3,761.2	3,782.9	3,847.6
13 Foreign banking offices in United States	337.1	412.6	475.8	516.1	516.1	517.9	525.6	510.1	504.2	487.8	465.7
14 Bank holding companies	18.4	18.0	22.0	27.4	27.4	31.2	26.8	28.3	26.5	25.0	25.0
15 Banks in U.S.-affiliated areas	29.2	33.4	34.1	37.8	37.8	39.2	40.4	41.1	43.8	42.7	45.0
16 Savings institutions	920.8	913.3	933.2	928.5	928.5	931.3	930.8	939.3	964.8	990.8	1,011.4
17 Credit unions	246.8	263.0	288.5	305.3	305.3	306.7	315.1	320.5	324.2	331.0	342.5
18 Bank personal trusts and estates	248.0	239.7	232.0	239.5	239.5	240.1	240.9	241.4	242.4	243.1	243.7
19 Life insurance companies	1,487.5	1,587.5	1,657.0	1,751.3	1,751.3	1,777.3	1,793.2	1,810.6	1,828.0	1,853.7	1,876.0
20 Other insurance companies	446.4	468.7	491.2	515.3	515.3	521.1	520.8	518.9	535.7	530.8	532.1
21 Private pension funds	660.9	716.9	769.2	834.7	834.7	853.4	885.9	909.8	953.4	968.5	1,006.0
22 State and local government retirement funds	497.4	531.0	568.2	632.0	632.0	648.9	668.5	684.9	697.0	715.6	724.9
23 Money market mutual funds	459.0	545.5	634.3	721.9	721.9	775.0	815.9	869.9	965.9	1,036.2	1,001.8
24 Mutual funds	718.8	771.3	820.2	901.1	901.1	940.0	979.1	1,005.9	1,025.9	1,050.5	1,078.1
25 Closed-end funds	86.0	96.4	101.1	98.3	98.3	99.4	100.5	101.7	102.8	103.9	105.0
26 Government-sponsored enterprises	663.3	750.0	807.9	902.2	902.2	951.4	989.4	1,055.4	1,163.0	1,201.9	1,267.1
27 Federally related mortgage pools	1,472.1	1,570.3	1,711.4	1,825.8	1,825.8	1,847.1	1,908.9	1,975.7	2,018.4	2,112.3	2,182.8
28 Asset-backed securities issuers (ABSs)	532.8	653.4	777.0	939.3	939.3	989.2	1,068.9	1,134.2	1,216.0	1,280.8	1,355.7
29 Finance companies	476.2	526.2	544.5	566.4	566.4	572.0	579.0	592.7	618.4	639.9	660.9
30 Mortgage companies	36.5	33.0	41.2	32.1	32.1	46.8	32.7	33.8	35.3	33.0	35.6
31 Real estate investment trusts (REITs)	24.6	26.0	30.4	50.6	50.6	57.0	58.5	55.7	45.5	45.9	45.3
32 Brokers and dealers	93.3	183.4	167.7	182.6	182.6	244.0	198.3	217.5	165.2	211.4	160.2
33 Funding corporations	106.0	87.4	101.4	149.4	149.4	173.5	172.6	155.1	151.7	166.4	192.2
RELATION OF LIABILITIES TO FINANCIAL ASSETS											
34 **Total credit market debt**	**17,206.4**	**18,454.5**	**19,823.7**	**21,278.1**	**21,278.1**	**21,783.9**	**22,286.0**	**22,764.5**	**23,402.9**	**24,005.5**	**24,428.7**
Other liabilities											
35 Official foreign exchange	53.2	63.7	53.7	48.9	48.9	48.2	50.1	54.5	60.1	53.6	50.9
36 Special drawing rights certificates	8.0	10.2	9.7	9.2	9.2	9.2	9.2	9.2	9.2	8.2	8.2
37 Treasury currency	17.6	18.2	18.3	18.3	18.3	18.4	18.4	18.8	18.3	18.3	18.5
38 Foreign deposits	373.9	418.8	516.1	618.8	618.8	607.2	630.4	651.7	639.9	671.8	700.4
39 Net interbank liabilities	280.1	290.7	240.8	219.4	219.4	179.6	189.1	198.7	187.7	180.5	196.4
40 Checkable deposits and currency	1,242.0	1,229.3	1,245.1	1,286.6	1,286.6	1,259.2	1,320.7	1,282.3	1,334.2	1,311.5	1,354.3
41 Small time and savings deposits	2,183.2	2,279.7	2,377.0	2,474.1	2,474.1	2,525.4	2,531.0	2,553.8	2,626.5	2,638.6	2,646.6
42 Large time deposits	411.2	476.9	590.9	713.4	713.4	760.9	754.0	776.5	805.5	804.3	809.0
43 Money market fund shares	602.9	745.3	891.1	1,048.7	1,048.7	1,130.7	1,153.7	1,249.7	1,334.2	1,416.0	1,398.1
44 Security repurchase agreements	549.5	660.0	701.5	822.4	822.4	889.3	861.5	918.9	875.0	980.3	961.4
45 Mutual fund shares	1,477.3	1,852.8	2,342.4	2,989.4	2,989.4	3,339.3	3,438.4	3,137.3	3,610.5	3,760.8	4,029.9
46 Security credit	279.0	305.7	358.1	469.1	469.1	505.3	540.6	579.0	577.4	552.7	576.7
47 Life insurance reserves	520.3	566.2	610.6	665.0	665.0	677.3	690.6	703.5	718.3	730.9	747.4
48 Pension fund reserves	4,948.1	5,767.8	6,642.5	7,894.4	7,894.4	8,583.1	8,730.8	8,194.6	9,160.7	9,335.8	9,770.1
49 Trade payables	1,140.6	1,242.3	1,328.4	1,424.6	1,424.6	1,419.2	1,405.0	1,418.3	1,424.3	1,430.4	1,454.6
50 Taxes payable	101.4	107.6	123.6	140.4	140.4	151.7	144.4	154.7	153.4	159.6	158.4
51 Investment in bank personal trusts	699.4	803.0	871.7	1,082.8	1,082.8	1,179.5	1,204.9	1,118.9	1,274.2	1,317.0	1,402.7
52 Miscellaneous	5,287.2	5,634.7	6,098.8	6,663.5	6,663.5	6,737.3	6,807.2	7,024.1	7,094.4	7,087.4	7,184.8
53 **Total liabilities**	**37,381.6**	**40,927.2**	**44,843.8**	**49,867.0**	**49,867.0**	**51,804.7**	**52,765.9**	**52,809.1**	**55,306.8**	**56,463.3**	**57,897.0**
Financial assets not included in liabilities (+)											
54 Gold and special drawing rights	21.1	22.1	21.4	21.1	21.1	21.2	21.0	21.2	21.6	20.7	20.8
55 Corporate equities	6,237.9	8,331.3	10,062.4	12,776.0	12,776.0	14,397.6	14,556.1	12,758.4	15,437.7	15,970.3	17,137.5
56 Household equity in noncorporate business	3,410.5	3,658.3	3,864.5	4,213.4	4,213.4	4,039.4	4,255.1	4,265.5	4,288.4	4,293.4	4,257.7
Liabilities not identified as assets (−)											
57 Treasury currency	−5.4	−5.8	−6.7	−7.3	−7.3	−7.4	−7.4	−7.2	−8.0	−8.4	−8.5
58 Foreign deposits	325.4	360.2	431.4	534.0	534.0	510.1	540.1	557.6	539.7	555.1	573.5
59 Net interbank transactions	−6.5	−9.0	−10.6	−32.2	−32.2	−21.2	−17.1	−15.4	−27.0	−11.3	−10.5
60 Security repurchase agreements	66.2	86.4	90.9	153.1	153.1	187.4	140.9	175.2	168.4	263.0	255.6
61 Taxes payable	48.8	62.4	76.7	93.5	93.5	89.6	95.6	101.9	103.9	90.6	108.2
62 Miscellaneous	−948.1	−1,350.8	−1,714.9	−2,087.0	−2,087.0	−2,259.2	−2,311.2	−2,449.9	−2,719.9	−2,953.5	−2,998.9
Floats not included in assets (−)											
63 Federal government checkable deposits	3.4	3.1	−1.6	−8.1	−8.1	−10.4	−16.1	−12.0	−3.9	−7.2	−12.4
64 Other checkable deposits	38.0	34.2	30.1	26.2	26.2	21.4	24.2	15.7	23.1	18.9	22.1
65 Trade credit	−245.9	−257.5	−307.7	−314.5	−314.5	−358.1	−412.2	−440.1	−373.7	−415.3	−432.3
66 **Total identified to sectors as assets**	**47,775.0**	**54,015.9**	**60,204.6**	**68,519.7**	**68,519.7**	**72,110.7**	**73,561.4**	**71,928.4**	**77,351.9**	**79,215.7**	**81,816.2**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.1 and L.5. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures

Monthly data seasonally adjusted, and indexes 1992=100, except as noted

Measure	1996r	1997r	1998r	1999								
				Feb.r	Mar.r	Apr.r	Mayr	Juner	Julyr	Aug.r	Sept.r	Oct.
1 **Industrial production**[1]	**119.4r**	**127.1r**	**132.4r**	**134.5**	**135.1**	**135.5**	**136.2**	**136.6**	**137.4**	**137.6**	**137.6**	**138.5**
Market groupings												
2 Products, total	114.2r	119.6	123.7r	125.8	126.0	126.2	126.8	126.8	126.9	127.3	126.9	127.9
3 Final, total	115.3r	121.1	125.4	127.3	127.3	127.6	128.2	128.3	128.6	129.1	128.5	129.6
4 Consumer goods	112.4r	115.1r	116.2r	117.2	116.7	116.5	116.8	117.0	116.8	117.4	116.5	118.2
5 Equipment	120.4r	132.1r	142.7r	144.9	145.9	147.0	148.4	148.3	149.3	149.8	149.6	149.7
6 Intermediate	110.8r	115.3r	118.8r	121.3	121.6	121.7	122.3	121.7	121.5	121.6	122.1	122.6
7 Materials	127.8	139.0r	146.5r	148.7	150.3	150.8	151.7	153.1	155.0	154.8	155.7	156.2
Industry groupings												
8 Manufacturing	121.3r	130.1r	136.4r	139.3	139.7	140.2	141.0	141.4	142.0	142.4	142.6	143.4
9 Capacity utilization, manufacturing (percent)[2]	81.5r	82.4r	80.9r	79.7	79.6	79.5	79.7	79.6	79.7	79.7	79.5	79.7
10 Construction contracts[3]	131.0r	143.3r	157.5r	168.0	166.0	171.0	172.0	177.0	171.0	162.0	165.0	165.0
11 Nonagricultural employment, total[4]	117.3	120.3	123.4	125.3	125.4	125.7	125.7	126.0	126.3	126.5	126.5	126.8
12 Goods-producing, total	2.4	2.4	2.3	102.7	102.5	102.5	102.1	102.1	102.3	101.9	102.0	102.1
13 Manufacturing, total	97.4	98.2	98.5	97.6	97.4	97.2	97.0	96.8	97.1	96.7	96.7	96.6
14 Manufacturing, production workers	98.6	99.6	99.6	98.3	98.2	98.0	97.8	97.5	98.0	97.4	97.4	97.4
15 Service-producing	123.1	126.5	130.1	132.5	132.7	133.1	133.2	133.6	134.0	134.3	134.3	134.7
16 Personal income, total	165.2r	175.4r	185.7r	192.7	193.2	194.1	194.9	196.4	197.0	197.8	197.9	200.4
17 Wages and salary disbursements	159.7r	171.3r	184.4r	192.8	193.2	194.3	195.2	196.3	197.8	198.6	199.4	200.7
18 Manufacturing	135.6r	144.6r	152.4r	154.4	154.4	155.1	155.9	156.8	158.2	158.0	159.1	159.5
19 Disposable personal income[5]	164.1r	172.9r	181.7r	188.1	188.8	189.7	190.3	191.8	192.1	193.3	192.8	195.6
20 Retail sales[5]	162.5	170.1	178.5	190.0	189.8	190.9	192.8	192.6	194.5	197.1	196.9	196.9
Prices[6]												
21 Consumer (1982–84=100)	156.9	160.5	163.0	164.5	165.0	166.2	166.2	166.2	166.7	167.1	167.9	168.2
22 Producer finished goods (1982=100)	131.3	131.8	130.7	130.8	131.1	131.9	132.4	132.7	132.9	133.7	134.8	135.0

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1999. The recent annual revision will be described in an article in the February 2000 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Ratio of index of production to index of capacity. Based on data from the Federal Reserve, DRI McGraw-Hill, U.S. Department of Commerce, and other sources.

3. Index of dollar value of total construction contracts, including residential, nonresidential, and heavy engineering, from McGraw-Hill Information Systems Company, F.W. Dodge Division.

4. Based on data from the U.S. Department of Labor, *Employment and Earnings*. Series covers employees only, excluding personnel in the armed forces.

5. Based on data from U.S. Department of Commerce, *Survey of Current Business*.

6. Based on data not seasonally adjusted. Seasonally adjusted data for changes in the price indexes can be obtained from the U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*.

NOTE. Basic data (not indexes) for series mentioned in notes 4 and 5, and indexes for series mentioned in notes 3 and 6, can also be found in the *Survey of Current Business*.

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data seasonally adjusted

Category	1996	1997	1998	1999							
				Mar.	Apr.	May	June	July	Aug.r	Sept.r	Oct.
HOUSEHOLD SURVEY DATA[1]											
1 Civilian labor force[2]	133,943	136,297	137,673	138,816	139,091	139,019	139,408	139,254	139,264	139,386	139,662
Employment											
2 Nonagricultural industries[3]	123,264	126,159	128,085	129,752	129,685	129,929	130,078	130,015	130,192	130,413	130,693
3 Agriculture	3,443	3,399	3,378	3,281	3,384	3,295	3,354	3,292	3,219	3,137	3,203
Unemployment											
4 Number	7,236	6,739	6,210	5,783	6,022	5,795	5,975	5,947	5,853	5,836	5,766
5 Rate (percent of civilian labor force)	5.4	4.9	4.5	4.2	4.3	4.2	4.3	4.3	4.2	4.2	4.1
ESTABLISHMENT SURVEY DATA											
6 **Nonagricultural payroll employment**[4]	**119,608**	**122,690**	**125,833**	**127,813**	**128,134**	**128,162**	**128,443**	**128,816**	**128,945**	**128,986**	**129,296**
7 Manufacturing	18,495	18,657	18,716	18,503	18,473	18,429	18,396	18,449	18,378	18,364	18,349
8 Mining	580	592	575	550	538	531	526	528	524	525	529
9 Contract construction	5,418	5,686	5,965	6,232	6,277	6,239	6,258	6,270	6,246	6,274	6,302
10 Transportation and public utilities	6,253	6,395	6,551	6,732	6,750	6,758	6,781	6,799	6,813	6,837	6,854
11 Trade	28,079	28,659	29,299	29,558	29,689	29,725	29,789	29,915	29,919	29,891	29,881
12 Finance	6,911	7,091	7,341	7,595	7,611	7,621	7,636	7,647	7,650	7,643	7,661
13 Service	34,454	36,040	37,525	38,556	38,697	38,782	38,952	39,055	39,205	39,245	39,460
14 Government	19,419	19,570	19,862	20,087	20,099	20,077	20,105	20,153	20,210	20,207	20,260

1. Beginning January 1994, reflects redesign of current population survey and population controls from the 1990 census.

2. Persons sixteen years of age and older, including Resident Armed Forces. Monthly figures are based on sample data collected during the calendar week that contains the twelfth day; annual data are averages of monthly figures. By definition, seasonality does not exist in population figures.

3. Includes self-employed, unpaid family, and domestic service workers.

4. Includes all full- and part-time employees who worked during, or received pay for, the pay period that includes the twelfth day of the month; excludes proprietors, self-employed persons, household and unpaid family workers, and members of the armed forces. Data are adjusted to the March 1992 benchmark, and only seasonally adjusted data are available at this time.

SOURCE. Based on data from U.S. Department of Labor, *Employment and Earnings*.

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION[1]

Seasonally adjusted

Series	1998	1999r			1998	1999r			1998	1999r		
	Q4r	Q1	Q2	Q3	Q4r	Q1	Q2	Q3	Q4r	Q1	Q2	Q3
	Output (1992=100)				Capacity (percent of 1992 output)				Capacity utilization rate (percent)[2]			
1 **Total industry**	**133.9**	**134.6**	**136.1**	**137.5**	**165.3**	**167.3**	**169.2**	**170.7**	**81.0**	**80.4**	**80.5**	**80.6**
2 Manufacturing	138.3	139.2	140.9	142.3	172.5	174.8	176.9	178.7	80.2	79.6	79.6	79.6
3 Primary processing[3]	121.1	122.2	122.5	123.5	146.4	147.4	148.2	149.0	82.8	82.9	82.7	82.9
4 Advanced processing[4]	147.4	148.1	150.5	152.2	185.6	188.6	191.4	193.7	79.4	78.5	78.6	78.5
5 Durable goods	165.8	167.1	170.8	174.3	206.0	210.3	214.2	217.6	80.5	79.5	79.8	80.1
6 Lumber and products	120.7	122.2	122.5	120.5	144.2	145.3	146.3	147.4	83.7	84.1	83.7	81.8
7 Primary metals	121.8	122.3	125.1	128.8	146.5	147.6	148.5	149.3	83.2	82.9	84.2	86.3
8 Iron and steel	114.9	116.9	121.4	126.6	146.9	148.5	150.0	151.3	78.3	78.7	80.9	83.7
9 Nonferrous	130.4	129.1	129.6	131.6	146.0	146.5	146.8	147.0	89.3	88.1	88.3	89.5
10 Industrial machinery and equipment	215.6	221.3	227.9	230.7	256.5	265.7	275.5	285.3	84.1	83.3	82.7	80.9
11 Electrical machinery	341.6	349.4	374.6	402.1	438.8	461.8	482.0	498.5	77.9	75.7	77.7	80.7
12 Motor vehicles and parts	148.7	147.5	150.6	153.2	184.6	184.8	184.8	184.9	80.6	79.8	81.5	82.9
13 Aerospace and miscellaneous transportation equipment	102.4	98.9	95.9	94.0	126.6	126.8	126.6	126.2	80.9	78.0	75.7	74.4
14 Nondurable goods	111.3	111.8	111.6	111.2	138.5	139.1	139.5	139.9	80.3	80.4	80.0	79.5
15 Textile mill products	106.7	109.6	111.1	111.1	131.4	131.4	131.5	131.6	81.2	83.4	84.5	84.4
16 Paper and products	114.5	115.8	115.1	116.0	133.0	133.8	134.5	135.3	86.1	86.6	85.6	85.7
17 Chemicals and products	115.1	115.9	116.3	116.3	149.5	150.0	150.4	150.7	77.0	77.3	77.3	77.2
18 Plastics materials	123.5	122.9	123.5	123.4	134.6	135.9	137.2	138.4	91.7	90.4	90.0	89.2
19 Petroleum products	114.0	116.3	114.1	114.9	121.1	121.8	122.2	122.7	94.1	95.6	93.3	93.7
20 Mining	100.4	97.6	97.1	98.1	120.4	120.4	120.3	120.2	83.3	81.1	80.7	81.6
21 Utilities	113.0	114.6	116.6	118.0	126.5	126.9	127.3	127.8	89.3	90.3	91.6	92.4
22 Electric	116.5	116.6	118.9	120.3	124.3	124.7	125.2	125.6	93.7	93.5	95.0	95.8

Series	1973	1975	Previous cycle[5]		Latest cycle[6]		1998	1999					
	High	Low	High	Low	High	Low	Oct.	May	June	July r	Aug. r	Sept. r	Oct. p
	Capacity utilization rate (percent)[2]												
1 **Total industry**	**89.2**	**72.6**	**87.3**	**71.1**	**85.4**	**78.1**	**81.5**	**80.5r**	**80.5r**	**80.7**	**80.6**	**80.4**	**80.7**
2 Manufacturing	88.5	70.5	86.9	69.0	85.7	76.6	80.5	79.7r	79.6r	79.7	79.7	79.5	79.7
3 Primary processing[3]	91.2	68.2	88.1	66.2	88.9	77.7	82.7	82.7r	82.7r	82.9	82.9	82.9	83.1
4 Advanced processing[4]	87.2	71.8	86.7	70.4	84.2	76.1	79.9	78.7r	78.6r	78.6	78.6	78.4	78.6
5 Durable goods	89.2	68.9	87.7	63.9	84.6	73.1	81.1	79.7r	79.9r	80.3	80.1	79.9	79.8
6 Lumber and products	88.7	61.2	87.9	60.8	93.6	75.5	83.3	84.7r	83.3r	82.7	81.6	81.1	80.8
7 Primary metals	100.2	65.9	94.2	45.1	92.7	73.7	83.9	83.5r	85.6r	85.9	87.1	85.8	87.2
8 Iron and steel	105.8	66.6	95.8	37.0	95.2	71.8	79.4	80.1r	82.8r	83.7	84.5	82.9	85.1
9 Nonferrous	90.8	59.8	91.1	60.1	89.3	74.2	89.4	87.6r	89.1r	88.6	90.3	89.6	89.7
10 Industrial machinery and equipment	96.0	74.3	93.2	64.0	85.4	72.3	84.8	82.9r	81.8r	81.5	80.5	80.6	80.2
11 Electrical machinery	89.2	64.7	89.4	71.6	84.0	75.0	78.5	77.4r	78.7r	80.9	81.0	80.1	80.5
12 Motor vehicles and parts	93.4	51.3	95.0	45.5	89.1	55.9	81.9	81.5r	82.7r	82.3	82.3	84.0	83.4
13 Aerospace and miscellaneous transportation equipment	78.4	67.6	81.9	66.6	87.3	79.2	81.9	75.8r	75.2r	74.9	75.0	73.4	71.9
14 Nondurable goods	87.8	71.7	87.5	76.4	87.3	80.7	80.4	80.2r	79.7r	79.4	79.6	79.5	80.1
15 Textile mill products	91.4	60.0	91.2	72.3	90.4	77.7	81.2	84.4r	84.2r	85.3	84.6	83.4	83.9
16 Paper and products	97.1	69.2	96.1	80.6	93.5	85.0	87.3	85.2r	85.9r	85.2	85.6	86.5	86.3
17 Chemicals and products	87.6	69.7	84.6	69.9	86.2	79.3	76.7	77.8r	77.3r	76.9	77.6	77.1	78.3
18 Plastics materials	102.0	50.6	90.9	63.4	97.0	74.8	89.5	90.5r	89.5	90.9	87.8	88.9	90.6
19 Petroleum products	96.7	81.1	90.0	66.8	88.5	85.1	93.0	93.4r	92.6r	93.9	93.4	93.8	94.3
20 Mining	94.3	88.2	96.0	80.3	88.0	87.0	84.3	81.0r	80.7r	81.3	81.8	81.6	81.7
21 Utilities	96.2	82.9	89.1	75.9	92.6	83.4	91.5	91.1r	92.1r	93.9	92.2	91.1	92.7
22 Electric	99.0	82.7	88.2	78.9	95.0	87.1	95.9	94.6r	95.5r	97.7	95.5	94.2	96.2

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1999. The recent annual revision will be described in an article in the February 2000 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Capacity utilization is calculated as the ratio of the Federal Reserve's seasonally adjusted index of industrial production to the corresponding index of capacity.

3. Primary processing includes textiles; lumber; paper; industrial chemicals; synthetic materials; fertilizer materials; petroleum products; rubber and plastics; stone, clay, and glass; primary metals; and fabricated metals.

4. Advanced processing includes foods; tobacco; apparel; furniture and fixtures; printing and publishing; chemical products such as drugs and toiletries; agricultural chemicals; leather and products; machinery; transportation equipment; instruments; and miscellaneous manufactures.

5. Monthly highs, 1978–80; monthly lows, 1982.

6. Monthly highs, 1988–89; monthly lows, 1990–91.

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]

Monthly data seasonally adjusted

Group	1992 proportion	1998 avg.	1998[r] Oct.	1998[r] Nov.	1998[r] Dec.	1999 Jan.[r]	1999 Feb.[r]	1999 Mar.[r]	1999 Apr.[r]	1999 May[r]	1999 June[r]	1999 July[r]	1999 Aug.[r]	1999 Sept.[r]	1999 Oct.[p]
			Index (1992 = 100)												
MAJOR MARKETS															
1 **Total index**	**100.0**	**132.4**	**134.1**	**133.8**	**133.8**	**134.1**	**134.5**	**135.1**	**135.5**	**136.2**	**136.6**	**137.4**	**137.6**	**137.6**	**138.5**
2 Products	60.5	123.7	125.8	125.1	124.9	125.4	125.8	126.0	126.2	126.8	126.8	126.9	127.3	126.9	127.9
3 Final products	46.3	125.4	127.5	126.8	126.0	126.6	127.3	127.3	127.6	128.2	128.3	128.6	129.1	128.5	129.6
4 Consumer goods, total	29.1	116.2	116.0	115.6	115.1	116.3	117.2	116.7	116.5	116.8	117.0	116.8	117.4	116.5	118.2
5 Durable consumer goods	6.1	142.7	146.2	145.4	146.0	149.1	150.9	149.9	152.0	152.8	154.0	153.4	155.7	152.7	155.3
6 Automotive products	2.6	134.7	143.4	142.0	141.7	143.7	142.0	140.0	142.0	145.4	147.4	143.7	150.6	145.5	146.5
7 Autos and trucks	1.7	138.4	151.4	150.2	148.2	149.4	148.7	147.0	149.0	153.2	157.5	148.9	162.9	152.8	154.4
8 Autos, consumer	.9	109.2	119.9	113.7	115.5	111.7	109.0	110.8	112.8	108.8	112.4	107.2	115.9	...	...
9 Trucks, consumer	.7	166.2	181.0	183.2	179.1	185.2	187.2	182.5	185.7	197.2	202.0	184.0	213.6	...	...
10 Auto parts and allied goods	.9	128.6	131.5	129.9	131.8	134.8	131.8	129.3	131.4	133.6	132.5	135.3	132.8	134.1	134.4
11 Other	3.5	149.0	147.6	147.3	148.8	152.8	158.0	157.8	160.0	158.3	158.8	161.1	159.2	158.2	162.2
12 Appliances, televisions, and air conditioners	1.0	262.8	268.2	273.3	283.5	299.7	320.0	317.6	325.8	311.1	319.0	329.9	320.4	316.8	341.1
13 Carpeting and furniture	.8	117.9	120.2	117.7	115.9	121.1	122.8	119.6	120.2	121.0	121.0	124.1	123.0	122.8	123.6
14 Miscellaneous home goods	1.6	115.2	110.5	110.1	111.0	111.0	113.6	115.7	116.9	117.2	116.2	115.9	115.4	114.7	115.6
15 Nondurable consumer goods	23.0	109.9	108.9	108.6	107.9	108.7	109.3	108.9	108.3	108.4	108.4	108.3	108.7	108.1	109.6
16 Foods and tobacco	10.3	108.6	108.0	108.4	107.2	108.4	109.4	108.4	107.8	107.7	107.3	106.7	106.5	106.2	107.0
17 Clothing	2.4	95.2	92.5	91.3	91.3	91.7	92.0	91.3	91.8	90.2	90.2	89.2	89.4	88.5	88.9
18 Chemical products	4.5	120.9	119.1	122.0	120.2	119.7	122.8	121.6	118.7	120.5	120.2	119.4	121.6	119.5	122.8
19 Paper products	2.9	105.6	104.4	103.4	102.8	101.5	100.4	98.8	99.9	100.3	101.5	102.0	103.2	104.6	105.9
20 Energy	2.9	112.6	113.8	106.3	108.6	113.1	109.9	115.4	115.1	114.7	115.3	118.6	116.6	116.1	118.5
21 Fuels	.8	110.5	108.1	109.6	110.1	112.2	113.4	110.7	111.5	110.9	109.9	111.1	110.0	111.2	113.5
22 Residential utilities	2.1	113.1	116.0	104.7	107.6	113.3	108.2	117.2	116.4	116.1	117.4	121.7	119.3	117.9	120.4
23 Equipment	17.2	142.7	147.5	146.3	145.2	144.6	144.9	145.9	147.0	148.4	148.3	149.3	149.8	149.6	149.7
24 Business equipment	13.2	161.2	168.4	167.0	166.3	165.9	166.3	167.5	169.4	171.2	171.2	172.6	172.9	172.8	172.7
25 Information processing and related	5.4	205.7	220.1	219.4	220.9	223.0	224.5	229.2	236.9	244.3	248.2	253.8	257.0	257.7	260.5
26 Computer and office equipment	1.1	526.9	628.6	642.8	657.8	677.5	703.1	736.1	773.0	805.8	830.2	851.9	871.7	887.1	905.5
27 Industrial	4.0	139.0	139.7	138.1	138.6	137.0	135.8	135.2	136.0	135.3	133.7	135.4	133.5	134.0	134.5
28 Transit	2.5	130.0	138.7	137.2	134.8	132.8	131.2	129.5	129.4	128.9	128.2	127.5	128.0	124.3	121.0
29 Autos and trucks	1.2	123.3	134.9	133.8	131.0	130.9	128.9	129.0	130.7	131.2	132.2	131.2	135.3	131.2	130.1
30 Other	1.3	139.8	141.4	139.7	133.0	132.6	139.9	143.0	135.7	134.0	130.2	123.8	123.0	126.4	123.7
31 Defense and space equipment	3.3	75.4	76.3	75.8	75.2	75.0	75.4	75.6	75.1	75.2	74.6	74.5	74.7	73.7	73.9
32 Oil and gas well drilling	.6	134.6	119.2	116.0	105.2	99.8	97.4	100.8	97.2	99.8	100.1	102.0	107.1	111.3	115.1
33 Manufactured homes	.2	166.3	168.5	171.2	172.5	173.3	169.2	168.8	164.7	161.3	158.9	151.5	151.3	132.5	130.0
34 Intermediate products, total	14.2	118.8	120.4	120.0	121.1	121.4	121.3	121.6	121.7	122.3	121.7	121.5	121.6	122.1	122.6
35 Construction supplies	5.3	128.0	129.8	130.3	132.2	133.3	132.5	131.7	131.3	132.9	132.6	133.2	133.0	133.8	134.3
36 Business supplies	8.9	113.4	114.9	113.9	114.5	114.3	114.7	115.6	116.1	116.1	115.3	114.6	114.8	115.1	115.6
37 Materials	39.5	146.5	147.6	147.9	148.5	148.2	148.7	150.3	150.8	151.7	153.1	155.0	154.8	155.7	156.2
38 Durable goods materials	20.8	182.1	187.0	187.7	189.2	188.8	189.2	191.9	193.1	194.3	197.2	200.3	200.2	202.7	203.2
39 Durable consumer parts	4.0	146.2	147.4	145.5	147.2	145.4	148.4	149.9	147.7	148.4	150.5	153.9	147.4	156.3	154.9
40 Equipment parts	7.6	295.6	316.4	319.6	322.1	323.1	324.4	331.5	340.5	345.0	355.2	364.6	370.8	371.6	374.7
41 Other	9.2	130.2	129.5	130.3	131.2	130.8	129.8	130.9	130.4	130.4	130.6	131.1	131.5	131.5	131.8
42 Basic metal materials	3.1	122.8	119.5	118.6	119.3	119.1	116.8	119.8	120.1	119.9	122.6	122.8	123.7	122.4	124.4
43 Nondurable goods materials	8.9	112.7	111.3	111.8	111.7	111.3	112.4	112.7	112.8	113.8	114.2	114.5	114.4	114.5	115.0
44 Textile materials	1.1	106.9	100.6	102.7	101.8	96.5	100.2	101.2	101.8	101.8	101.2	101.2	101.0	100.1	100.2
45 Paper materials	1.8	115.7	115.3	112.8	114.4	116.1	115.6	116.3	116.5	115.3	117.7	116.3	116.2	118.8	119.0
46 Chemical materials	3.9	112.9	111.2	112.7	111.3	111.6	112.8	113.6	114.2	116.0	116.9	117.7	117.5	117.4	117.7
47 Other	2.1	112.4	113.0	113.7	114.6	113.4	114.4	113.3	111.9	114.2	112.0	113.0	113.2	111.9	113.3
48 Energy materials	9.7	103.1	103.2	102.1	101.6	101.8	101.7	102.4	102.2	102.2	101.6	102.9	102.4	101.5	102.1
49 Primary energy	6.3	101.0	101.5	100.4	98.8	99.1	99.1	99.1	97.3	98.3	98.9	100.2	100.4	98.9	99.2
50 Converted fuel materials	3.3	107.8	106.2	105.3	107.0	106.8	106.7	108.9	111.7	109.9	106.8	108.0	106.1	106.3	107.9
SPECIAL AGGREGATES															
51 Total excluding autos and trucks	97.1	132.4	133.9	133.6	133.7	133.9	134.4	135.1	135.4	136.1	136.4	137.3	137.3	137.5	138.4
52 Total excluding motor vehicles and parts	95.1	131.9	133.3	133.1	133.2	133.5	133.9	134.6	134.9	135.6	135.9	136.7	136.9	136.8	137.8
53 Total excluding computer and office equipment	98.2	128.1	129.2	128.8	128.7	128.8	129.1	129.5	129.7	130.2	130.6	131.2	131.3	131.3	132.0
54 Consumer goods excluding autos and trucks	27.4	115.0	114.2	113.8	113.4	114.6	115.5	115.1	114.8	114.8	114.8	115.0	115.1	114.6	116.3
55 Consumer goods excluding energy	26.2	116.7	116.3	116.7	115.9	116.7	118.0	116.9	116.7	117.0	117.2	116.6	117.6	116.6	118.2
56 Business equipment excluding autos and trucks	12.0	165.6	172.2	170.8	170.3	169.9	170.6	171.9	173.8	175.7	175.7	177.4	177.2	177.5	177.5
57 Business equipment excluding computer and office equipment	12.1	142.6	146.5	144.8	143.7	142.7	142.4	142.6	143.4	144.2	143.6	144.4	144.1	143.6	143.1
58 Materials excluding energy	29.8	160.2	161.7	162.4	163.3	162.9	163.6	165.5	166.3	167.4	169.5	171.6	171.5	173.1	173.6

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]—Continued

Group	SIC code[2]	1992 proportion	1998 avg.	1998[r] Oct.	1998[r] Nov.	1998[r] Dec.	1999 Jan.[r]	1999 Feb.[r]	1999 Mar.[r]	1999 Apr.[r]	1999 May[r]	1999 June[r]	1999 July[r]	1999 Aug.[r]	1999 Sept.[r]	1999 Oct.[p]
				Index (1992 = 100)												
MAJOR INDUSTRIES																
59 **Total index**	...	**100.0**	**132.4**	**134.1**	**133.8**	**133.8**	**134.1**	**134.5**	**135.1**	**135.5**	**136.2**	**136.6**	**137.4**	**137.6**	**137.6**	**138.5**
60 Manufacturing	...	85.4	136.4	138.3	138.3	138.4	138.6	139.3	139.7	140.2	141.0	141.4	142.0	142.4	142.6	143.4
61 Primary processing	...	26.5	121.2	120.7	120.8	121.9	122.2	122.1	122.4	122.2	122.5	122.7	123.3	123.5	123.8	124.3
62 Advanced processing	...	58.9	144.0	147.5	147.5	147.2	147.2	148.4	148.8	149.6	150.7	151.2	151.8	152.3	152.4	153.4
63 Durable goods	...	45.0	160.7	165.8	165.4	166.2	166.3	166.8	168.1	169.4	170.8	172.2	173.8	174.3	174.8	175.5
64 Lumber and products	24	2.0	118.5	119.8	119.9	122.5	122.6	122.3	121.7	121.5	123.9	122.2	121.5	120.2	119.8	119.6
65 Furniture and fixtures	25	1.4	122.0	124.2	123.7	123.3	122.7	124.6	125.8	123.8	124.4	124.4	125.7	126.7	127.8	127.1
66 Stone, clay, and glass products	32	2.1	126.8	128.4	130.1	131.8	133.1	132.2	130.8	128.8	128.5	127.8	129.3	130.1	130.2	130.4
67 Primary metals	33	3.1	125.6	122.5	120.5	122.5	122.9	120.1	124.0	123.9	123.9	127.4	128.0	130.0	128.4	130.6
68 Iron and steel	331,2	1.7	122.6	116.2	112.1	116.5	118.1	114.6	118.1	119.4	120.1	124.5	126.2	127.9	125.7	129.5
69 Raw steel	331PT	.1	115.3	110.0	101.6	102.7	106.8	106.8	108.3	109.3	111.4	110.7	111.1	115.9	112.4	118.4
70 Nonferrous	333–6,9	1.4	129.4	130.4	130.9	130.0	128.9	127.0	131.4	129.4	128.6	130.8	130.2	132.7	131.7	132.0
71 Fabricated metal products	34	5.0	128.8	128.1	128.6	129.8	129.0	128.4	128.5	128.0	127.2	128.3	128.6	128.8	129.0	129.7
72 Industrial machinery and equipment	35	8.0	206.4	215.0	215.3	216.6	217.5	221.7	224.6	227.0	228.4	228.2	230.0	229.7	232.5	234.2
73 Computer and office equipment	357	1.8	675.1	786.8	805.3	832.2	868.1	907.1	947.6	987.5	1,021.6	1,048.2	1,075.1	1,101.6	1,123.5	1,149.3
74 Electrical machinery	36	7.3	315.1	338.2	341.7	344.8	346.7	347.5	354.0	366.4	373.3	384.2	399.2	403.9	403.2	409.5
75 Transportation equipment	37	9.5	121.6	127.1	124.9	123.9	122.7	123.2	122.6	122.1	122.8	123.5	122.9	122.9	123.2	121.7
76 Motor vehicles and parts	371	4.9	141.7	151.1	148.0	147.1	146.5	147.8	148.1	148.4	150.6	152.9	152.2	152.2	155.4	154.3
77 Autos and light trucks	371PT	2.6	127.8	139.9	138.1	136.4	136.5	135.0	134.0	135.7	138.3	142.0	135.8	146.9	139.5	140.2
78 Aerospace and miscellaneous transportation equipment	372–6,9	4.6	101.7	103.6	102.3	101.2	99.4	99.3	97.9	96.5	96.0	95.2	94.7	94.7	92.5	90.5
79 Instruments	38	5.4	112.6	114.4	113.0	112.8	113.3	112.9	113.7	115.1	116.7	117.0	117.2	116.9	117.0	117.4
80 Miscellaneous	39	1.3	122.0	120.5	119.5	120.8	120.6	121.8	122.9	124.2	125.5	124.5	125.2	125.2	125.2	126.4
81 Nondurable goods	...	40.4	111.6	111.2	111.6	111.1	111.3	112.3	111.8	111.5	111.9	111.3	111.0	111.3	111.3	112.2
82 Foods	20	9.4	109.3	109.5	110.9	110.3	111.0	111.4	110.9	110.6	110.6	110.0	108.9	108.9	109.4	109.8
83 Tobacco products	21	1.6	106.2	100.7	96.0	91.1	94.8	99.2	95.4	94.1	95.4	94.5	96.0	94.8	91.0	92.8
84 Textile mill products	22	1.8	110.9	106.6	107.0	106.4	108.0	110.5	110.1	111.4	110.9	110.8	112.3	111.3	109.8	110.6
85 Apparel products	23	2.2	96.6	94.8	93.3	93.2	92.3	92.2	91.8	92.4	91.2	90.7	89.8	88.7	87.8	88.4
86 Paper and products	26	3.6	114.9	115.8	112.8	114.9	115.7	115.9	115.9	115.0	114.6	115.7	115.0	115.8	117.3	117.3
87 Printing and publishing	27	6.7	105.1	105.1	105.1	105.3	104.3	104.3	103.7	104.2	104.1	103.5	102.8	103.6	104.1	104.9
88 Chemicals and products	28	9.9	115.1	114.4	116.2	114.7	114.5	116.6	116.8	115.6	117.0	116.3	115.8	117.0	116.2	118.2
89 Petroleum products	29	1.4	113.3	112.5	114.8	114.8	117.2	117.0	114.9	114.6	114.2	113.4	115.1	114.5	115.1	115.9
90 Rubber and plastic products	30	3.5	133.2	133.6	134.9	135.6	135.4	135.6	135.8	136.2	137.4	136.4	138.0	137.6	139.3	138.7
91 Leather and products	31	.3	77.1	75.0	75.1	73.2	71.9	71.5	71.3	70.6	70.9	71.3	69.1	70.2	70.1	69.0
92 Mining	...	6.9	103.8	101.6	101.5	98.1	98.0	97.4	97.5	96.7	97.4	97.1	97.8	98.4	98.1	98.2
93 Metal	10	.5	109.1	106.5	109.4	106.6	102.9	101.3	98.5	100.5	100.2	98.9	96.2	93.3	93.6	95.0
94 Coal	12	1.0	109.7	110.9	112.4	109.2	107.7	108.9	103.9	107.3	106.1	107.0	110.0	110.7	109.5	108.9
95 Oil and gas extraction	13	4.8	99.5	96.4	94.7	91.5	91.2	90.7	92.1	90.8	91.8	91.4	92.3	93.3	93.1	93.4
96 Stone and earth minerals	14	.6	123.4	122.6	128.9	124.1	129.4	127.1	126.6	121.8	123.9	123.3	120.5	120.2	120.7	118.9
97 Utilities	...	7.7	114.4	115.6	110.8	112.5	114.5	112.6	116.8	116.3	116.1	117.4	119.8	117.8	116.5	118.7
98 Electric	491,493PT	6.2	116.9	119.0	114.7	115.9	115.8	114.9	119.1	118.6	118.4	119.6	122.6	120.0	118.4	121.1
99 Gas	492,493PT	1.6	103.2	100.1	93.3	97.5	108.8	102.5	106.4	105.7	105.8	107.5	107.4	108.2	108.0	108.0
SPECIAL AGGREGATES																
100 Manufacturing excluding motor vehicles and parts	...	80.5	136.1	137.6	137.8	138.0	138.2	138.9	139.3	139.8	140.5	140.8	141.4	141.9	141.9	142.8
101 Manufacturing excluding computer and office equipment	...	83.6	131.4	132.5	132.5	132.5	132.4	133.0	133.1	133.4	134.1	134.3	134.8	135.0	135.1	135.8
102 Computers, communications equipment, and semiconductors	...	5.9	563.8	633.9	645.5	656.4	665.0	676.0	700.3	731.6	753.3	780.5	812.1	830.0	836.3	849.8
103 Manufacturing excluding computers and semiconductors	...	81.1	120.4	121.0	120.7	120.7	120.6	121.1	121.0	120.9	121.3	121.2	121.3	121.5	121.5	122.1
104 Manufacturing excluding computers, communications equipment, and semiconductors	...	79.5	118.5	119.0	118.8	118.7	118.6	119.1	118.9	118.7	119.1	118.9	118.9	118.9	119.0	119.5
				Gross value (billions of 1992 dollars, annual rates)												
Major Markets																
105 **Products, total**	...	**2,001.9**	**2,642.2**	**2,690.7**	**2,677.2**	**2,674.9**	**2,693.7**	**2,699.9**	**2,701.8**	**2,710.2**	**2,721.9**	**2,723.6**	**2,726.1**	**2,736.6**	**2,727.1**	**2,746.7**
106 Final	...	1,552.1	2,036.5	2,074.6	2,064.3	2,056.0	2,072.5	2,079.5	2,080.1	2,087.2	2,095.3	2,100.3	2,102.8	2,113.6	2,101.0	2,118.7
107 Consumer goods	...	1,049.6	1,271.0	1,274.9	1,270.5	1,267.6	1,286.4	1,292.3	1,287.9	1,288.4	1,290.1	1,295.1	1,292.4	1,300.3	1,289.8	1,307.3
108 Equipment	...	502.5	767.9	801.1	795.1	789.6	787.0	788.1	793.3	800.1	806.7	806.7	812.3	815.1	813.2	812.8
109 Intermediate	...	449.9	606.1	614.8	611.7	617.5	619.9	619.1	620.4	621.7	625.2	622.1	622.0	621.8	624.8	626.7

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1999. The recent annual revision will be described in an article in the February 2000 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Standard industrial classification.

2.14 HOUSING AND CONSTRUCTION

Monthly figures at seasonally adjusted annual rates except as noted

Item	1996	1997	1998	1998 Dec.	1999 Jan.	Feb.	Mar.	Apr.	May	June	July[r]	Aug.[r]	Sept.
	Private residential real estate activity (thousands of units except as noted)												
NEW UNITS													
1 Permits authorized	1,426	1,441	1,604	1,708	1,778	1,738	1,654	1,572	1,591	1,641	1,641	1,619	1,506
2 One-family	1,070	1,062	1,184	1,296	1,275	1,306	1,242	1,214	1,243	1,241	1,247	1,210	1,171
3 Two-family or more	356	379	421	412	503	432	412	358	348	400	394	409	335
4 Started	1,477	1,474	1,617	1,750	1,820	1,752	1,746	1,577	1,668	1,607	1,680	1,655	1,626
5 One-family	1,161	1,134	1,271	1,383	1,393	1,380	1,394	1,260	1,389	1,305	1,332	1,289	1,289
6 Two-family or more	316	340	346	367	427	372	352	317	279	302	348	366	337
7 Under construction at end of period[1]	819	834	935	999	1,011	1,032	1,036	1,031	1,029	1,017	1,021	1,028	1,024
8 One-family	584	570	638	688	697	712	714	708	708	702	704	706	703
9 Two-family or more	235	264	297	311	314	320	322	323	321	315	317	322	321
10 Completed	1,406	1,406	1,473	1,440	1,648	1,528	1,700	1,633	1,650	1,674	1,609	1,580	1,671
11 One-family	1,123	1,120	1,158	1,150	1,292	1,246	1,357	1,324	1,334[r]	1,346	1,263	1,255	1,311
12 Two-family or more	283	285	315	290	356	282	343	309	316[r]	328	346	325	360
13 Mobile homes shipped	361	354	372	382	390	381	383	368	365	355	336	340	320
Merchant builder activity in one-family units													
14 Number sold	757	804	886	958	908	909	885	952	914	932	929	923	848
15 Number for sale at end of period[1]	326	287	300	295	295	297	300	300	304	306	305	307	310
Price of units sold (thousands of dollars)[2]													
16 Median	140.0	146.0	152.5	152.5	152.5	159.9	155.0	160.0	154.8	158.3	157.9	155.0	159.9
17 Average	166.4	176.2	181.9	183.3	182.8	191.4	189.4	191.4	188.2	193.4	188.8	193.5	193.9
EXISTING UNITS (one-family)													
18 Number sold	4,196	4,381	4,970	5,340	5,060	5,140	5,420	5,250	5,000	5,630	5,400	5,240	5,130
Price of units sold (thousands of dollars)[2]													
19 Median	115.8	121.8	128.4	128.5	130.3	128.1	129.6	130.7	132.8	136.9	136.0	137.4	134.4
20 Average	141.8	150.5	159.1	159.6	162.8	159.6	162.3	163.8	167.4	174.2	171.9	174.3	170.2
	Value of new construction (millions of dollars)[3]												
CONSTRUCTION													
21 Total put in place	**581,920**	**617,877**	**664,451**	**690,462**	**697,858**	**710,657**	**715,396**	**704,582**	**698,461**	**698,852**	**702,517**	**698,381**	**697,450**
22 Private	447,593	474,842	518,987	541,591	543,471	548,682	555,362	547,885	546,880	546,931	546,375	541,690	539,767
23 Residential	255,577	265,908	293,569	310,261	315,828	318,483	323,133	322,213	321,803	320,913	320,352	318,816	318,838
24 Nonresidential	192,017	208,933	225,418	231,330	227,643	230,199	232,229	225,672	225,077	226,018	226,023	222,874	220,929
25 Industrial buildings	32,644	31,355	32,308	30,327	29,895	28,967	29,052	26,217	24,975	25,465	26,246	25,679	23,772
26 Commercial buildings	75,829	86,190	95,252	101,605	100,164	102,802	103,983	102,180	104,134	104,457	103,441	102,498	103,920
27 Other buildings	30,648	37,198	39,438	42,354	38,833	40,449	39,840	39,737	38,876	38,592	38,365	37,735	37,323
28 Public utilities and other	52,896	54,190	58,421	57,044	58,751	57,981	59,354	57,538	57,092	57,504	57,971	56,962	55,914
29 Public	134,326	143,035	145,464	148,871	154,387	161,975	160,033	156,697	151,581	151,921	156,142	156,691	157,682
30 Military	2,604	2,559	2,588	2,306	1,881	2,636	2,223	2,268	2,128	2,137	2,305	1,679	1,941
31 Highway	39,883	44,295	45,067	44,583	50,538	54,880	53,099	50,897	48,542	45,518	47,747	48,148	49,087
32 Conservation and development	5,827	5,576	5,487	5,406	6,018	6,271	6,194	6,016	5,101	5,845	5,810	6,581	6,277
33 Other	86,012	90,605	92,322	96,576	95,950	98,188	98,517	97,516	95,810	98,421	100,280	100,283	100,377

1. Not at annual rates.
2. Not seasonally adjusted.
3. Recent data on value of new construction may not be strictly comparable with data for previous periods because of changes by the Bureau of the Census in its estimating techniques. For a description of these changes, see *Construction Reports* (C-30-76-5), issued by the Census Bureau in July 1976.

SOURCE. Bureau of the Census estimates for all series except (1) mobile homes, which are private, domestic shipments as reported by the Manufactured Housing Institute and seasonally adjusted by the Census Bureau, and (2) sales and prices of existing units, which are published by the National Association of Realtors. All back and current figures are available from the originating agency. Permit authorizations are those reported to the Census Bureau from 19,000 jurisdictions beginning in 1994.

2.15 CONSUMER AND PRODUCER PRICES

Percentage changes based on seasonally adjusted data except as noted

Item	Change from 12 months earlier		Change from 3 months earlier (annual rate)				Change from 1 month earlier					Index level, Oct. 1999
	1998 Oct.	1999 Oct.	1998	1999[r]			1999					
			Dec.[r]	Mar.	June	Sept.	June	July	Aug.	Sept.	Oct.	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**1.5**	**2.6**	**2.0**	**1.5**	**2.9**	**4.2**	**.0**	**.3**	**.3**	**.4**	**.2**	**168.2**
2 Food	2.4	1.9	2.8	1.7	1.7	2.5	.0	.2	.2	.2	.2	165.1
3 Energy items	−9.1	10.2	−5.1	5.8	14.2	29.4	−1.2	2.1	2.7	1.7	−.1	111.6
4 All items less food and energy	2.3	2.1	2.5	.9	2.3	2.5	.1	.2	.1	.3	.2	178.3
5 Commodities	.8	1.0	2.5	−3.0	2.0	2.5	.0	.1	−.1	.7	.1	145.3
6 Services	3.0	2.5	2.5	2.7	2.5	2.3	.1	.3	.2	.2	.3	197.2
PRODUCER PRICES (1982=100)												
7 Finished goods	−.7	2.7	2.2	.6	2.8	7.1	.0[r]	.2	.5	1.1	−.1	135.0
8 Consumer foods	.3	.1	.3	2.1	.0	2.4	.3[r]	−.8[r]	.4	1.0	−.7	135.6
9 Consumer energy	−10.3	12.1	−8.9	5.7	23.2	42.4	−.4[r]	3.1[r]	3.7	2.2	−1.0	83.6
10 Other consumer goods	2.1	3.0	8.3	−1.3	.8	3.8	.1[r]	.0[r]	−.1	1.1	.3	153.5
11 Capital equipment	−.3	.3	.3	−.6	−.3	.6	−.2[r]	−.1	.0	.2	.3	138.5
Intermediate materials												
12 Excluding foods and feeds	−2.3	2.6	−4.5	.3	6.1	6.6	.3[r]	.6	.7	.3	.3	125.9
13 Excluding energy	−1.1	1.1	−2.7	−.9	3.1	2.7	.3	.4	.2	.1	.4	134.2
Crude materials												
14 Foods	−5.8	−4.0	−7.0	4.1	−.8	1.2	.3[r]	−4.6[r]	3.8	1.3	−.1	99.6
15 Energy	−29.3	36.6	13.5	−21.1	163.8	121.9	.0[r]	3.1[r]	7.2	10.4	−4.8	89.6
16 Other	−14.1	7.0	−24.3	.9	8.6	26.6	.8[r]	2.0[r]	1.8	2.2	2.4	142.5

1. Not seasonally adjusted.
2. Figures for consumer prices are for all urban consumers and reflect a rental-equivalence measure of homeownership.

SOURCE. U.S. Department of Labor, Bureau of Labor Statistics.

2.16 GROSS DOMESTIC PRODUCT AND INCOME

Billions of current dollars except as noted; quarterly data at seasonally adjusted annual rates

Account	1996	1997	1998	1998		1999		
				Q3	Q4	Q1	Q2	Q3
GROSS DOMESTIC PRODUCT								
1 **Total**	**7,813.2**	**8,300.8**	**8,759.9**	**8,797.9**	**8,947.6**	**9,072.7**	**9,146.2**	**9,295.3**
By source								
2 Personal consumption expenditures	5,237.5	5,524.4	5,848.6	5,889.6	5,973.7	6,090.8	6,200.8	6,299.6
3 Durable goods	616.5	642.9	698.2	696.9	722.8	739.0	751.6	761.8
4 Nondurable goods	1,574.1	1,641.7	1,708.9	1,716.6	1,742.9	1,787.8	1,824.8	1,853.5
5 Services	3,047.0	3,239.8	3,441.5	3,476.1	3,508.0	3,564.0	3,624.3	3,684.3
6 Gross private domestic investment	1,242.7	1,383.7	1,531.2	1,535.3	1,580.3	1,594.3	1,585.4	1,636.0
7 Fixed investment	1,212.7	1,315.4	1,460.0	1,461.7	1,508.9	1,543.3	1,567.8	1,599.1
8 Nonresidential	899.4	986.1	1,091.3	1,087.2	1,121.4	1,139.9	1,155.4	1,187.9
9 Structures	225.0	254.1	272.8	271.7	278.0	274.7	272.5	273.7
10 Producers' durable equipment	674.4	732.1	818.5	815.4	843.4	865.2	882.9	914.3
11 Residential structures	313.3	329.2	368.7	374.5	387.5	403.4	412.4	411.2
12 Change in business inventories	30.0	68.3	71.2	73.7	71.4	51.0	17.6	36.9
13 Nonfarm	22.2	65.6	70.9	74.7	56.2	40.9	12.8	36.1
14 Net exports of goods and services	−89.0	−88.3	−149.6	−165.7	−161.2	−201.6	−245.8	−276.7
15 Exports	874.2	968.0	966.3	949.1	981.8	966.9	978.2	1,008.7
16 Imports	963.1	1,056.3	1,115.9	1,114.8	1,143.1	1,168.5	1,224.0	1,285.4
17 Government consumption expenditures and gross investment	1,421.9	1,481.0	1,529.7	1,538.7	1,554.8	1,589.1	1,605.9	1,636.4
18 Federal	531.6	537.8	538.7	539.7	546.7	557.4	561.6	569.5
19 State and local	890.4	943.2	991.0	999.0	1,008.1	1,031.8	1,044.3	1,067.0
By major type of product								
20 Final sales, total	7,783.2	8,232.4	8,688.7	8,724.2	8,876.2	9,021.6	9,128.6	9,258.4
21 Goods	2,921.3	3,074.1	3,239.1	3,231.9	3,318.4	3,365.6	3,406.6	3,455.6
22 Durable	1,331.9	1,424.8	1,528.9	1,519.9	1,571.4	1,584.3	1,601.7	1,634.3
23 Nondurable	1,589.4	1,649.3	1,710.3	1,712.1	1,747.0	1,781.3	1,804.9	1,821.3
24 Services	4,191.0	4,434.7	4,664.6	4,700.4	4,747.9	4,820.7	4,885.5	4,962.8
25 Structures	670.9	723.7	785.1	791.9	809.9	835.3	836.5	839.9
26 Change in business inventories	30.0	68.3	71.2	73.7	71.4	51.0	17.6	36.9
27 Durable goods	19.1	35.6	39.0	39.8	38.6	24.1	6.3	21.4
28 Nondurable goods	10.9	32.8	32.3	33.9	32.8	27.0	11.4	15.4
MEMO								
29 **Total GDP in chained 1992 dollars**	**7,813.2**	**8,165.1**	**8,516.3**	**8,536.0**	**8,659.2**	**8,737.9**	**8,778.6**	**8,897.7**
NATIONAL INCOME								
30 **Total**	**6,210.2**	**6,634.9**	**7,036.4**	**7,087.1**	**7,193.8**	**7,334.5**	**7,423.1**	**7,522.4**
31 Compensation of employees	4,395.6	4,675.7	5,011.2	5,053.6	5,134.7	5,217.7	5,287.1	5,373.1
32 Wages and salaries	3,630.1	3,884.7	4,189.5	4,227.9	4,300.8	4,371.5	4,432.6	4,508.9
33 Government and government enterprises	641.0	664.4	692.8	696.7	702.8	715.8	721.3	730.6
34 Other	2,989.1	3,220.3	3,496.7	3,531.2	3,598.0	3,655.7	3,711.3	3,778.3
35 Supplement to wages and salaries	765.4	791.0	821.7	825.7	833.9	846.2	854.5	864.2
36 Employer contributions for social insurance	275.4	290.1	306.0	308.1	311.8	318.3	321.5	325.6
37 Other labor income	490.0	500.9	515.7	517.7	522.1	528.0	533.0	538.6
38 Proprietors' income[1]	544.7	578.6	606.1	606.4	637.1	639.9	655.3	653.6
39 Business and professional[1]	510.5	549.1	581.0	583.6	596.0	607.5	621.2	632.2
40 Farm[1]	34.3	29.5	25.1	22.9	41.1	32.5	34.1	21.4
41 Rental income of persons[2]	129.7	130.2	137.4	139.3	147.0	148.6	148.8	140.9
42 Corporate profits[1]	753.9	837.9	846.1	843.8	834.3	882.0	875.5	883.7
43 Profits before tax[3]	726.3	795.9	781.9	780.1	766.7	818.1	835.8	857.8
44 Inventory valuation adjustment	3.1	7.4	20.9	19.8	20.8	13.3	−13.6	−26.5
45 Capital consumption adjustment	24.4	34.6	43.3	43.9	46.9	50.6	53.2	52.4
46 Net interest	386.3	412.5	435.7	444.0	440.8	446.3	456.4	471.1

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.
3. For after-tax profits, dividends, and the like, see table 1.48.

SOURCE. U.S. Department of Commerce, *Survey of Current Business*.

2.17 PERSONAL INCOME AND SAVING

Billions of current dollars except as noted; quarterly data at seasonally adjusted annual rates

Account	1996	1997	1998	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1999 Q3
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**6,547.4**	**6,951.1**	**7,358.9**	**7,413.6**	**7,530.8**	**7,630.2**	**7,732.6**	**7,827.5**
2 Wage and salary disbursements	3,626.5	3,888.9	4,186.0	4,224.4	4,297.3	4,371.5	4,432.6	4,508.9
3 Commodity-producing industries	908.2	975.5	1,038.7	1,045.6	1,056.6	1,062.9	1,075.1	1,091.0
4 Manufacturing	673.7	718.8	757.5	762.3	765.6	767.0	774.8	787.2
5 Distributive industries	822.4	879.1	944.6	953.5	969.9	986.3	997.6	1,012.6
6 Service industries	1,254.9	1,369.8	1,509.9	1,528.6	1,568.0	1,606.6	1,638.5	1,674.7
7 Government and government enterprises	641.0	664.4	692.8	696.7	702.8	715.8	721.3	730.6
8 Other labor income	490.0	500.9	515.7	517.7	522.1	528.0	533.0	538.6
9 Proprietors' income[1]	544.7	578.6	606.1	606.4	637.1	639.9	655.3	653.6
10 Business and professional[1]	510.5	549.1	581.0	583.6	596.0	607.5	621.2	632.2
11 Farm[1]	34.3	29.5	25.1	22.9	41.1	32.5	34.1	21.4
12 Rental income of persons[2]	129.7	130.2	137.4	139.3	147.0	148.6	148.8	140.9
13 Dividends	297.4	333.4	348.3	348.0	351.9	356.1	361.2	367.0
14 Personal interest income	810.6	854.9	897.8	909.3	906.4	907.4	920.5	933.4
15 Transfer payments	928.8	962.4	983.6	986.5	991.0	1,007.8	1,013.6	1,021.8
16 Old-age survivors, disability, and health insurance benefits	537.6	565.8	578.1	579.6	581.1	588.9	593.0	599.0
17 LESS: Personal contributions for social insurance	280.4	298.1	315.9	318.0	322.0	328.9	332.3	336.7
18 EQUALS: Personal income	6,547.4	6,951.1	7,358.9	7,413.6	7,530.8	7,630.2	7,732.6	7,827.5
19 LESS: Personal tax and nontax payments	869.7	968.3	1,072.6	1,088.3	1,113.0	1,124.8	1,139.4	1,160.2
20 EQUALS: Disposable personal income	5,677.7	5,982.8	6,286.2	6,325.3	6,417.8	6,505.4	6,593.2	6,667.3
21 LESS: Personal outlays	5,405.6	5,711.7	6,056.6	6,100.5	6,190.3	6,310.3	6,425.2	6,527.9
22 EQUALS: Personal saving	272.1	271.1	229.7	224.8	227.5	195.1	168.0	139.4
MEMO								
Per capita (chained 1992 dollars)								
23 Gross domestic product	29,428.2	30,466.8	31,471.9	31,509.8	31,882.2	32,112.8	32,179.6	32,532.7
24 Personal consumption expenditures	19,726.9	20,275.0	21,059.1	21,154.3	21,339.5	21,640.6	21,854.1	22,043.1
25 Disposable personal income	21,385.0	21,954.0	22,636.0	22,715.0	22,924.0	23,110.0	23,239.0	23,328.0
26 Saving rate (percent)	4.8	4.5	3.7	3.6	3.5	3.0	2.5	2.1
GROSS SAVING								
27 **Gross saving**	**1,349.3**	**1,521.3**	**1,646.0**	**1,664.1**	**1,685.4**	**1,727.8**	**1,709.5**	**1,739.3**
28 Gross private saving	1,290.4	1,362.0	1,371.2	1,367.7	1,382.3	1,389.4	1,359.3	1,359.1
29 Personal saving	272.1	271.1	229.7	224.8	227.5	195.1	168.0	139.4
30 Undistributed corporate profits[1]	232.5	265.9	257.2	251.1	246.5	277.6	259.5	257.2
31 Corporate inventory valuation adjustment	3.1	7.4	20.9	19.8	20.8	13.3	−13.6	−26.5
Capital consumption allowances								
32 Corporate	543.6	579.4	619.2	625.0	637.1	645.8	657.2	675.4
33 Noncorporate	238.5	249.8	261.5	263.3	267.7	271.0	274.6	287.0
34 Gross government saving	58.9	159.3	274.8	296.4	303.0	338.3	350.2	380.1
35 Federal	−51.5	37.7	134.3	147.1	147.8	187.2	208.3	225.9
36 Consumption of fixed capital	85.3	86.6	87.4	87.5	88.1	89.6	90.2	91.2
37 Current surplus or deficit (−), national accounts	−136.8	−48.8	46.9	59.6	59.7	97.6	118.1	134.7
38 State and local	110.4	121.5	140.5	149.3	155.2	151.1	141.9	154.2
39 Consumption of fixed capital	88.9	94.0	98.8	99.4	101.1	102.4	104.3	106.0
40 Current surplus or deficit (−), national accounts	21.4	27.5	41.7	49.9	54.2	48.7	37.6	48.3
41 **Gross investment**	**1,382.1**	**1,518.1**	**1,598.4**	**1,576.2**	**1,623.0**	**1,628.4**	**1,574.0**	**1,594.4**
42 Gross private domestic investment	1,242.7	1,383.7	1,531.2	1,535.3	1,580.3	1,594.3	1,585.4	1,636.0
43 Gross government investment	250.2	258.1	268.7	273.5	272.6	289.8	292.2	294.8
44 Net foreign investment	−110.7	−123.7	−201.5	−232.6	−229.9	−255.7	−303.7	−336.4
45 **Statistical discrepancy**	**32.8**	**−3.2**	**−47.6**	**−87.9**	**−62.4**	**−99.4**	**−135.5**	**−144.8**

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.

SOURCE. U.S. Department of Commerce, *Survey of Current Business*.

3.10 U.S. INTERNATIONAL TRANSACTIONS Summary

Millions of dollars; quarterly data seasonally adjusted except as noted[1]

Item credits or debits	1996	1997	1998	1998			1999	
				Q2	Q3	Q4	Q1	Q2[p]
1 Balance on current account	−129,295	−143,465	−220,562	−52,400	−63,476	−61,669	−68,654	−80,673
2 Balance on goods and services	−104,318	−104,730	−164,282	−41,961	−45,724	−43,262	−53,974	−65,016
3 Exports	849,806	938,543	933,907	231,889	229,284	236,904	231,904	234,526
4 Imports	−954,124	−1,043,273	−1,098,189	−273,850	−275,008	−280,166	−285,878	−299,542
5 Income, net	17,210	3,231	−12,205	−553	−6,965	−4,933	−4,340	−4,382
6 Investment, net	21,754	8,185	−6,956	735	−5,637	−3,571	−2,946	−3,011
7 Direct	67,746	69,220	59,405	16,177	11,834	14,558	14,834	14,103
8 Portfolio	−45,992	−61,035	−66,361	−15,442	−17,471	−18,129	−17,780	−17,114
9 Compensation of employees	−4,544	−4,954	−5,249	−1,288	−1,328	−1,362	−1,394	−1,371
10 Unilateral current transfers, net	−42,187	−41,966	−44,075	−9,886	−10,787	−13,474	−10,340	−11,275
11 Change in U.S. government assets other than official reserve assets, net (increase, −)	−989	68	−429	−483	185	−50	119	−380
12 Change in U.S. official reserve assets (increase, −)	6,668	−1,010	−6,784	−1,945	−2,026	−2,369	4,068	1,159
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	370	−350	−149	72	188	−227	563	−190
15 Reserve position in International Monetary Fund	−1,280	−3,575	−5,118	−1,031	−2,078	−1,924	3	1,413
16 Foreign currencies	7,578	2,915	−1,517	−986	−136	−218	3,502	−64
17 Change in U.S. private assets abroad (increase, −)	−386,441	−464,354	−285,605	−118,089	−60,256	−48,188	−19,335	−124,940
18 Bank-reported claims[3]	−91,555	−144,822	−24,918	−27,704	−33,344	37,192	27,771	−37,082
19 Nonbank-reported claims	−86,333	−120,403	−25,041	−14,327	−20,320	16,202	−13,853	−26,429
20 U.S. purchases of foreign securities, net	−115,859	−89,174	−102,817	−32,886	14,994	−70,809	8,132	−26,387
21 U.S. direct investments abroad, net	−92,694	−109,955	−132,829	−43,172	−21,586	−30,773	−41,385	−35,042
22 Change in foreign official assets in United States (increase, +)	127,390	18,119	−21,684	−10,551	−46,489	24,352	4,708	−986
23 U.S. Treasury securities	115,671	−6,690	−9,957	−20,318	−32,811	31,836	800	−6,708
24 Other U.S. government obligations	5,008	4,529	6,332	254	1,906	1,562	5,993	5,792
25 Other U.S. government liabilities[3]	−316	−1,798	−3,113	−807	−224	−1,054	−1,594	−770
26 Other U.S. liabilities reported by U.S. banks[3]	5,704	22,286	−11,469	9,488	−12,866	−7,133	−589	1,202
27 Other foreign official assets[4]	1,323	−208	−3,477	832	−2,494	−859	98	−502
28 Change in foreign private assets in United States (increase, +)	447,457	733,542	524,321	173,017	140,036	125,453	84,152	242,033
29 U.S. bank-reported liabilities[2]	16,478	149,026	40,731	34,138	77,313	−21,811	−14,184	49,374
30 U.S. nonbank-reported liabilities	39,404	107,779	9,412	18,040	11,875	−53,210	20,188	−710
31 Foreign private purchases of U.S. Treasury securities, net	154,996	146,433	46,155	25,759	−1,438	24,391	−8,781	−5,517
32 U.S. currency flows	17,362	24,782	16,622	2,349	7,277	6,250	2,440	3,057
33 Foreign purchases of other U.S. securities, net	130,240	196,258	218,026	71,785	20,103	49,328	61,540	77,272
34 Foreign direct investments in United States, net	88,977	109,264	193,375	20,946	24,906	120,505	22,949	118,557
35 Capital account transactions, net[5]	672	292	617	160	148	166	166	180
36 Discrepancy	−65,462	−143,192	10,126	10,291	31,878	−37,695	−5,224	−36,393
37 Due to seasonal adjustment	...	...	...	528	−10,582	4,144	5,264	582
38 Before seasonal adjustment	−65,462	−143,192	10,126	9,763	42,460	−41,839	−10,488	−36,975
MEMO								
Changes in official assets								
39 U.S. official reserve assets (increase, −)	6,668	−1,010	−6,784	−1,945	−2,026	−2,369	4,068	1,159
40 Foreign official assets in United States, excluding line 25 (increase, +)	127,706	19,917	−18,571	−9,744	−46,265	25,406	6,302	−216
41 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	14,911	12,124[r]	−11,499	−657[r]	−11,642[r]	2,057[r]	2,058	1,774

1. Seasonal factors are not calculated for lines 11–16, 18–20, 22–35, and 38–41.
2. Reporting banks included all types of depository institutions as well as some brokers and dealers.
3. Associated primarily with military sales contracts and other transactions arranged with or through foreign official agencies.
4. Consists of investments in U.S. corporate stocks and in debt securities of private corporations and state and local governments.
5. Consists of capital transfers (such as those of accompanying migrants entering or leaving the country and debt forgiveness) and the acquisition and disposal of nonproduced nonfinancial assets.

SOURCE. U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business.*

3.11 U.S. FOREIGN TRADE[1]

Millions of dollars; monthly data seasonally adjusted

Item	1996	1997	1998	1999						
				Mar.	Apr.	May	June	July	Aug.[r]	Sept.[p]
1 Goods and services, balance	−104,318	−104,731	−164,282	−19,311	−18,787	−21,390	−24,604	−24,886	−23,549	−24,408
2 Merchandise	−191,270	−196,652	−246,932	−25,680	−25,334	−27,899	−31,179	−31,422	−30,132	−30,591
3 Services	86,952	91,921	82,650	6,369	6,547	6,509	6,575	6,536	6,583	6,183
4 Goods and services, exports	849,806	938,543	933,907	77,047	78,113	77,978	78,623	79,122	82,443	81,705
5 Merchandise	612,057	679,715	670,246	54,326	55,269	55,121	55,472	55,890	59,139	58,549
6 Services	237,749	258,828	263,661	22,721	22,844	22,857	23,151	23,232	23,304	23,156
7 Goods and services, imports	−954,124	−1,043,273	−1,098,189	−96,358	−96,900	−99,368	−103,227	−104,008	−105,992	−106,113
8 Merchandise	−803,327	−876,366	−917,178	−80,006	−80,603	−83,020	−86,651	−87,312	−89,271	−89,140
9 Services	−150,797	−166,907	−181,011	−16,352	−16,297	−16,348	−16,576	−16,696	−16,721	−16,973

1. Data show monthly values consistent with quarterly figures in the U.S. balance of payments accounts.

SOURCE. *FT900*, U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis.

3.12 U.S. RESERVE ASSETS

Millions of dollars, end of period

Asset	1996	1997	1998	1999							
				Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[p]
1 **Total**	**75,090**	**69,954**	**81,755**	**73,694**	**72,121**	**71,689**	**73,305**	**72,649[r]**	**73,414**	**73,230**	**72,318**
2 Gold stock, including Exchange Stabilization Fund[1]	11,049	11,050	11,041	11,049	11,049	11,046	11,048	11,046[r]	11,047	11,049	11,049
3 Special drawing rights[2,3]	10,312	10,027	10,603	9,634	9,784	9,719	9,925	10,152	10,284	10,232	10,326
4 Reserve position in International Monetary Fund[2]	15,435	18,071	24,111	23,054	21,689	21,462	21,462	19,885	19,978	19,571	18,707
5 Foreign currencies[4]	38,294	30,809	36,001	29,957	29,599	29,462	30,870	31,566	32,105	32,378	32,236

1. Gold held "under earmark" at Federal Reserve Banks for foreign and international accounts is not included in the gold stock of the United States; see table 3.13, line 3. Gold stock is valued at $42.22 per fine troy ounce.
2. Special drawing rights (SDRs) are valued according to a technique adopted by the International Monetary Fund (IMF) in July 1974. Values are based on a weighted average of exchange rates for the currencies of member countries. From July 1974 through December 1980, sixteen currencies were used; since January 1981, five currencies have been used. U.S. SDR holdings and reserve positions in the IMF also have been valued on this basis since July 1974.
3. Includes allocations of SDRs by the International Monetary Fund on Jan. 1 of the year indicated, as follows: 1970—$867 million; 1971—$717 million; 1972—$710 million; 1979—$1,139 million; 1980—$1,152 million; 1981—$1,093 million; plus net transactions in SDRs.
4. Valued at current market exchange rates.

3.13 FOREIGN OFFICIAL ASSETS HELD AT FEDERAL RESERVE BANKS[1]

Millions of dollars, end of period

Asset	1996	1997	1998	1999							
				Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[p]
1 **Deposits**	**167**	**457**	**167**	**260**	**157**	**409**	**257**	**166**	**243**	**189**	**500**
Held in custody											
2 U.S. Treasury securities[2]	638,049	620,885	607,574	606,662	606,579	611,372	619,004	626,669	634,086	621,351	629,430
3 Earmarked gold[3]	11,197	10,763	10,343	10,340	10,340	10,329	10,329	10,271	10,155	10,114	10,015

1. Excludes deposits and U.S. Treasury securities held for international and regional organizations.
2. Marketable U.S. Treasury bills, notes, and bonds and nonmarketable U.S. Treasury securities, in each case measured at face (not market) value.
3. Held in foreign and international accounts and valued at $42.22 per fine troy ounce; not included in the gold stock of the United States.

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1997	1998	1999						
			Mar.	Apr.	May	June	July	Aug.	Sept.[p]
1 **Total**[1]	**776,505**	**759,933[r]**	**765,689**	**766,509[r]**	**760,410**	**765,708**	**773,494**	**782,508[r]**	**778,976**
By type									
2 Liabilities reported by banks in the United States[2]	135,384	125,878[r]	124,743	135,731[r]	124,270	126,180	125,873	126,220[r]	124,348
3 U.S. Treasury bills and certificates[3]	148,301	134,177	141,941	135,765	136,199	138,518	147,492	153,499	152,457
U.S. Treasury bonds and notes									
4 Marketable	428,004	432,127	425,046	418,350	421,573	421,970	420,197	422,590	420,794
5 Nonmarketable[4]	5,994	6,074	6,191	6,231	6,143	5,982	6,022	6,060	6,098
6 U.S. securities other than U.S. Treasury securities[5]	58,822	61,677	67,768	70,432	72,225	73,058	73,910	74,139	75,279
By area									
7 Europe[1]	252,289	256,026	253,970	245,500	242,386	241,989	240,546	243,334	241,233
8 Canada	36,177	36,715	39,611	38,563	38,181	39,001	39,147	39,342	39,337
9 Latin America and Caribbean	96,942	79,498[r]	72,828	81,379	81,075	76,828	77,832	75,339[r]	74,475
10 Asia	400,144	400,641[r]	412,353	413,991[r]	411,739	421,282	430,050	438,300	437,957
11 Africa	9,981	10,059	9,906	9,656	9,326	8,378	8,376	8,122	8,314
12 Other countries	7,058	3,080	3,107	3,506	3,789	4,316	3,629	4,157	3,746

1. Includes the Bank for International Settlements.
2. Principally demand deposits, time deposits, bankers acceptances, commercial paper, negotiable time certificates of deposit, and borrowings under repurchase agreements.
3. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.
4. Excludes notes issued to foreign official nonreserve agencies. Includes current value of zero-coupon Treasury bond issues to foreign governments as follows: Mexico, beginning March 1988, 20-year maturity issue and beginning March 1990, 30-year maturity issue; Venezuela, beginning December 1990, 30-year maturity issue; Argentina, beginning April 1993, 30-year maturity issue.
5. Debt securities of U.S. government corporations and federally sponsored agencies, and U.S. corporate stocks and bonds.

SOURCE. Based on U.S. Department of the Treasury data and on data reported to the department by banks (including Federal Reserve Banks) and securities dealers in the United States, and on the 1994 benchmark survey of foreign portfolio investment in the United States.

3.16 LIABILITIES TO, AND CLAIMS ON, FOREIGNERS Reported by Banks in the United States[1] Payable in Foreign Currencies

Millions of dollars, end of period

Item	1995	1996	1997	1998		1999	
				Sept.	Dec.	Mar.	June
1 Banks' liabilities	109,713	103,383	117,524	92,934	101,125	101,359	97,751
2 Banks' claims	74,016	66,018	83,038	67,901	78,152	80,642	67,864
3 Deposits	22,696	22,467	28,661	27,293	45,985	42,147	41,895
4 Other claims	51,320	43,551	54,377	40,608	32,167	38,495	25,969
5 Claims of banks' domestic customers[2]	6,145	10,978	8,191	8,453	20,718	11,039	23,474

1. Data on claims exclude foreign currencies held by U.S. monetary authorities.
2. Assets owned by customers of the reporting bank located in the United States that represent claims on foreigners held by reporting banks for the accounts of the domestic customers.

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. dollars

Millions of dollars, end of period

Item	1996	1997	1998	1999						
				Mar.	Apr.	May	June	July	Aug.[r]	Sept.[p]
BY HOLDER AND TYPE OF LIABILITY										
1 **Total, all foreigners**	**1,162,148**	**1,283,027**	**1,347,771[r]**	**1,337,872[r]**	**1,334,719[r]**	**1,352,678[r]**	**1,382,649[r]**	**1,339,888[r]**	**1,385,668**	**1,387,565**
2 Banks' own liabilities	758,998	882,980	884,873[r]	872,957[r]	880,209[r]	900,891[r]	920,125[r]	889,661[r]	908,116	927,332
3 Demand deposits	27,034	31,344	29,556	30,913	31,180	32,184	36,322	43,183	44,940	44,596
4 Time deposits[2]	186,910	198,546	152,226[r]	152,158[r]	157,680[r]	156,515[r]	156,677	156,891	155,199	156,435
5 Other[3]	143,510	168,011	140,245	157,083	160,670[r]	160,800[r]	152,683[r]	151,819[r]	152,163	161,587
6 Own foreign offices[4]	401,544	485,079	562,846	532,803[r]	530,679[r]	551,392	574,443	537,768[r]	555,814	564,714
7 Banks' custodial liabilities[5]	403,150	400,047	462,898[r]	464,915[r]	454,510[r]	451,787	462,524	450,227	477,552	460,233
8 U.S. Treasury bills and certificates[6]	236,874	193,239	183,494	192,838[r]	178,514[r]	177,768	179,351	187,872	192,096	189,030
9 Other negotiable and readily transferable instruments[7]	72,011	93,641	141,699[r]	133,311	129,051	124,100	123,246	121,567	132,405	128,914
10 Other	94,265	113,167	137,705	138,766	146,945	149,919	159,927	140,788	153,051	142,289
11 Nonmonetary international and regional organizations[8]	13,972	11,690	11,883[r]	15,337	15,921[r]	14,067[r]	17,987	18,463	18,468	18,646
12 Banks' own liabilities	13,355	11,486	10,850	14,621	15,184[r]	13,320[r]	16,002	16,964	17,056	17,726
13 Demand deposits	29	16	172	194	13	25	49	66	31	21
14 Time deposits[2]	5,784	5,466	5,793	6,856	6,324	5,840	7,231	7,380	6,419	7,370
15 Other[3]	7,542	6,004	4,885	7,571	8,847[r]	7,455[r]	8,722	9,518	10,606	10,335
16 Banks' custodial liabilities[5]	617	204	1,033[r]	716	737	747	1,985	1,499	1,412	920
17 U.S. Treasury bills and certificates[6]	352	69	636	548	555	616	956	953	896	661
18 Other negotiable and readily transferable instruments[7]	265	133	397[r]	168	182	131	1,029	533	516	259
19 Other	0	2	0	0	0	0	0	13	0	0
20 Official institutions[9]	312,019	283,685	260,055[r]	266,684	271,496[r]	260,469	264,698	273,365	279,719	276,805
21 Banks' own liabilities	79,406	102,028	80,251	76,996	86,001[r]	79,452	78,445	80,400	77,801	76,980
22 Demand deposits	1,511	2,314	3,003	3,393	3,599	2,789	2,952	2,652	2,537	2,932
23 Time deposits[2]	33,336	41,396	29,602	23,840	29,049[r]	27,372	26,643	26,845	24,856	25,301
24 Other[3]	44,559	58,318	47,646	49,763	53,353	49,291	48,850	50,903	50,408	48,747
25 Banks' custodial liabilities[5]	232,613	181,657	179,804[r]	189,688	185,495	181,017	186,253	192,965	201,918	199,825
26 U.S. Treasury bills and certificates[6]	198,921	148,301	134,177	141,941	135,765	136,199	138,518	147,492	153,499	152,457
27 Other negotiable and readily transferable instruments[7]	33,266	33,151	44,953[r]	47,174	49,443	44,586	47,582	45,094	48,297	46,633
28 Other	426	205	674	573	287	232	153	379	122	735
29 Banks[10]	694,835	815,247	885,047	851,791[r]	848,313[r]	881,368	910,025[r]	853,184	888,328	881,993
30 Banks' own liabilities	562,898	641,447	675,998	648,795[r]	646,602[r]	676,341	695,251[r]	656,403	676,931	692,334
31 Unaffiliated foreign banks	161,354	156,368	113,152	115,992	115,923[r]	124,949	120,808[r]	118,635[r]	121,117	127,620
32 Demand deposits	13,692	16,767	14,071	13,985	13,344	15,957	15,812	14,086	15,436	14,087
33 Time deposits[2]	89,765	83,433	46,219	49,101	50,206	49,217[r]	47,998	49,540	49,872	49,667
34 Other[3]	57,897	56,168	52,862	52,906	52,373[r]	59,775[r]	56,998[r]	55,009[r]	55,809	63,866
35 Own foreign offices[4]	401,544	485,079	562,846	532,803[r]	530,679[r]	551,392	574,443	537,768[r]	555,814	564,714
36 Banks' custodial liabilities[5]	131,937	173,800	209,049	202,996	201,711	205,027	214,774	196,781	211,397	189,659
37 U.S. Treasury bills and certificates[6]	23,106	31,915	35,359	36,737	29,636	28,323	27,757	28,284	26,314	24,749
38 Other negotiable and readily transferable instruments[7]	17,027	35,393	45,102	37,304	34,959	35,580	36,983	37,459	41,541	40,370
39 Other	91,804	106,492	128,588	128,955	137,116	141,124	150,034	131,038	143,542	124,540
40 Other foreigners	141,322	172,405	190,786[r]	204,060[r]	198,989[r]	196,774	189,939[r]	194,876[r]	199,153	210,121
41 Banks' own liabilities	103,339	128,019	117,774[r]	132,545[r]	132,422[r]	131,778	130,427[r]	135,894[r]	136,328	140,292
42 Demand deposits	11,802	12,247	12,310	13,341	14,224	13,413	17,509	26,379	26,936	27,556
43 Time deposits[2]	58,025	68,251	70,612[r]	72,361[r]	72,101[r]	74,086	74,805	73,126	74,052	74,097
44 Other[3]	33,512	47,521	34,852	46,843	46,097[r]	44,279	38,113[r]	36,389[r]	35,340	38,639
45 Banks' custodial liabilities[5]	37,983	44,386	73,012	71,515[r]	66,567[r]	64,996	59,512	58,982	62,825	69,829
46 U.S. Treasury bills and certificates[6]	14,495	12,954	13,322	13,612[r]	12,558[r]	12,630	12,120	11,143	11,387	11,163
47 Other negotiable and readily transferable instruments[7]	21,453	24,964	51,247	48,665	44,467	43,803	37,652	38,481	42,051	41,652
48 Other	2,035	6,468	8,443	9,238	9,542	8,563	9,740	9,358	9,387	17,014
MEMO										
49 Negotiable time certificates of deposit in custody for foreigners	14,573	16,083	27,026	23,035	21,718	24,141	22,569	21,811	22,565	24,367

1. Reporting banks include all types of depository institutions as well as some brokers and dealers. Excludes bonds and notes of maturities longer than one year.
2. Excludes negotiable time certificates of deposit, which are included in "Other negotiable and readily transferable instruments."
3. Includes borrowing under repurchase agreements.
4. For U.S. banks, includes amounts owed to own foreign branches and foreign subsidiaries consolidated in quarterly Consolidated Reports of Condition filed with bank regulatory agencies. For agencies, branches, and majority-owned subsidiaries of foreign banks, consists principally of amounts owed to the head office or parent foreign bank, and to foreign branches, agencies, or wholly owned subsidiaries of the head office or parent foreign bank.
5. Financial claims on residents of the United States, other than long-term securities, held by or through reporting banks for foreign customers.
6. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.
7. Principally bankers acceptances, commercial paper, and negotiable time certificates of deposit.
8. Principally the International Bank for Reconstruction and Development, the Inter-American Development Bank, and the Asian Development Bank. Excludes "holdings of dollars" of the International Monetary Fund.
9. Foreign central banks, foreign central governments, and the Bank for International Settlements.
10. Excludes central banks, which are included in "Official institutions."

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]—Continued

Item	1996	1997	1998	1999						
				Mar.	Apr.	May	June	July	Aug.	Sept.[p]
AREA										
50 **Total, all foreigners**	**1,162,148**	**1,283,027**	**1,347,771[r]**	**1,337,872[r]**	**1,334,719[r]**	**1,352,678[r]**	**1,382,649[r]**	**1,339,888[r]**	**1,385,668[r]**	**1,387,565**
51 **Foreign countries**	**1,148,176**	**1,271,337**	**1,335,888[r]**	**1,322,535[r]**	**1,318,798[r]**	**1,338,611**	**1,364,662[r]**	**1,321,425[r]**	**1,367,200[r]**	**1,368,919**
52 Europe	376,590	419,672	427,367	418,437[r]	409,543[r]	434,124	430,580	438,232	450,827[r]	454,733
53 Austria	5,128	2,717	3,178	3,274	2,428	2,224	2,678	2,770	3,210	3,459
54 Belgium and Luxembourg	24,084	41,007	42,818	41,468	37,991	39,227	31,298	31,242	34,834	33,434
55 Denmark	2,565	1,514	1,437	1,992	1,300	1,267	961	1,143	1,811	1,903
56 Finland	1,958	2,246	1,862	1,800	1,655	1,645	1,384	1,358	1,335	1,222
57 France	35,078	46,607	44,616	47,937	49,097	48,328	45,235	42,622	42,424	45,808
58 Germany	24,660	23,737	21,357	23,747	18,575	24,689	21,999	23,950	23,719	24,477
59 Greece	1,835	1,552	2,066	2,447	2,237	2,691	2,737	3,168	3,121	3,358
60 Italy	10,946	11,378	7,103	5,744	5,910	5,943	6,192	6,426	5,840	6,231
61 Netherlands	11,110	7,385	10,793	12,273	11,037	11,752	12,152	12,206	11,292	11,638
62 Norway	1,288	317	710	1,022	1,181	1,210	1,049	1,184	1,333	1,225
63 Portugal	3,562	2,262	3,235	2,237	2,277	2,461	2,439	2,237	1,912	1,976
64 Russia	7,623	7,968	2,439	2,500	2,693	2,794	2,871	2,756	2,665	2,816
65 Spain	17,707	18,989	15,775	9,336	11,075	8,083	8,678	7,700	8,194	9,479
66 Sweden	1,623	1,628	3,027	2,193	1,974	3,429	2,966	3,851	3,779	4,571
67 Switzerland	44,538	39,023	50,654	47,874	54,551[r]	66,214	65,967	60,758	76,176[r]	70,353
68 Turkey	6,738	4,054	4,286	5,639	5,783[r]	5,810	5,914	7,786	7,883	8,368
69 United Kingdom	153,420	181,904	181,554	175,303[r]	169,826[r]	178,015	187,310	200,038	192,431	196,459
70 Yugoslavia[11]	206	239	233	274	221	242	254	289	270	266
71 Other Europe and other former U.S.S.R.[12]	22,521	25,145	30,224	31,377	29,732	28,100	28,496	26,748	28,598	27,690
72 Canada	38,920	28,341	30,212	31,788	28,360	28,543	30,416[r]	29,862[r]	30,409[r]	29,698
73 Latin America and Caribbean	467,529	536,393	554,808[r]	551,709[r]	578,156[r]	591,047	610,201[r]	554,346	581,338[r]	581,398
74 Argentina	13,877	20,199	19,013	16,891	18,349	16,428	17,804	17,202	17,061	15,544
75 Bahamas	88,895	112,217	118,085	119,206[r]	118,648[r]	118,122	123,549[r]	122,465	132,442	139,101
76 Bermuda	5,527	6,911	6,846[r]	7,514	6,957	7,951	9,168	9,410	9,319	8,747
77 Brazil	27,701	31,037	15,800	13,841	17,128	17,295	14,696	15,389	15,399[r]	16,208
78 British West Indies	251,465	276,418	302,472	300,109	322,011	334,386	347,368	294,208	315,799	310,904
79 Chile	2,915	4,072	5,010	5,057	6,805	7,236	5,918	6,744	5,805	6,601
80 Colombia	3,256	3,652	4,616	4,636	4,710	4,861	4,615	4,634	4,452[r]	4,708
81 Cuba	21	66	62	63	64	64	70	70	72	76
82 Ecuador	1,767	2,078	1,572	1,606	1,688	1,800	1,930	1,975	1,724	1,792
83 Guatemala	1,282	1,494	1,333	1,392	1,386	1,449	1,468	1,425	1,521	1,471
84 Jamaica	628	450	577[r]	551	534	547	527	471	533	550
85 Mexico	31,240	33,972	37,148	36,621[r]	36,004	37,588	37,920	39,024	36,301[r]	35,028
86 Netherlands Antilles	6,099	5,085	5,010	7,256	5,633	3,853	5,662	3,012	3,408	2,927
87 Panama	4,099	4,241	3,864	4,196	3,974	3,984	4,130	3,844	3,816	4,029
88 Peru	834	893	840	810	819	854	816	836	994[r]	1,041
89 Uruguay	1,890	2,382	2,486	2,378	2,345	2,331	2,552	2,319	2,147[r]	2,175
90 Venezuela	17,363	21,601	19,894	19,149	20,512	21,204	20,393	20,437	19,796	19,446
91 Other	8,670	9,625	10,180[r]	10,433	10,589[r]	11,094	11,615	10,881	10,749[r]	11,050
92 Asia	249,083	269,379	307,960[r]	305,525[r]	287,723[r]	269,026	276,917	283,218	288,974[r]	287,197
China										
93 Mainland	30,438	18,252	13,441[r]	13,996	16,350	14,753	13,366	10,872	12,359	11,914
94 Taiwan	15,995	11,840	12,708	13,183	12,641	10,795	11,408	12,482	12,678	12,544
95 Hong Kong	18,789	17,722	20,900	27,631[r]	26,338[r]	25,728	24,575	24,200	24,149[r]	23,368
96 India	3,930	4,567	5,250	6,189	5,979	5,520	5,421	5,864	5,408	5,625
97 Indonesia	2,298	3,554	8,282	6,675	7,434	6,211	6,530	7,309	6,633	6,468
98 Israel	6,051	6,281	7,749	8,246	7,037	7,004	6,144	5,076	5,059	5,688
99 Japan	117,316	143,401	168,563	161,887	142,326	132,605	143,635	145,652	145,403[r]	149,518
100 Korea (South)	5,949	13,060	12,524[r]	11,141	10,003[r]	11,387	12,901	12,792	12,723[r]	11,903
101 Philippines	3,378	3,250	3,324	2,362	2,440	2,492	2,273	2,177	2,189	2,414
102 Thailand	10,912	6,501	7,359	6,588	6,296	5,739	5,296	6,054	5,809	5,281
103 Middle Eastern oil-exporting countries[13]	16,285	14,959	15,609	15,433	14,497	15,453	15,168	15,581	15,942[r]	14,367
104 Other	17,742	25,992	32,251	32,194	36,382	31,339	30,200	35,159	40,622[r]	38,107
105 Africa	8,116	10,347	8,905	8,463	7,874	7,713	7,485	7,508	7,660	8,065
106 Egypt	2,012	1,663	1,339	1,758	1,599	1,339	1,576	1,566	1,851	1,852
107 Morocco	112	138	97	85	90	72	101	116	108	118
108 South Africa	458	2,158	1,522	1,258	1,165	1,132	1,091	1,049	885[r]	753
109 Zaire	10	10	5	9	4	12	16	13	13	13
110 Oil-exporting countries[14]	2,626	3,060	3,088	2,772	2,534	2,508	2,247	2,281	2,510[r]	2,808
111 Other	2,898	3,318	2,854	2,581	2,482	2,650	2,454	2,483	2,293[r]	2,521
112 Other	7,938	7,205	6,636	6,613	7,142	8,158	9,063	8,259	7,992[r]	7,828
113 Australia	6,479	6,304	5,495	5,582	5,987	6,820	7,624	7,252	6,963	6,789
114 Other	1,459	901	1,141	1,031	1,155	1,338	1,439	1,007	1,029[r]	1,039
115 Nonmonetary international and regional organizations	13,972	11,690	11,883[r]	15,337	15,921[r]	14,067[r]	17,987	18,463	18,468[r]	18,646
116 International[15]	12,099	10,517	10,221	12,845	13,494[r]	11,759[r]	14,987	15,822	16,312[r]	16,570
117 Latin American regional[16]	1,339	424	594	1,394	1,304	653	898	819	725[r]	662
118 Other regional[17]	534	749	1,068[r]	1,098	1,123	1,655	2,102	1,822	1,431	1,414

11. Since December 1992, has excluded Bosnia, Croatia, and Slovenia.

12. Includes the Bank for International Settlements. Since December 1992, has included all parts of the former U.S.S.R. (except Russia), and Bosnia, Croatia, and Slovenia.

13. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

14. Comprises Algeria, Gabon, Libya, and Nigeria.

15. Principally the International Bank for Reconstruction and Development. Excludes "holdings of dollars" of the International Monetary Fund.

16. Principally the Inter-American Development Bank.

17. Asian, African, Middle Eastern, and European regional organizations, except the Bank for International Settlements, which is included in "Other Europe."

3.18 BANKS' OWN CLAIMS ON FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. Dollars

Millions of dollars, end of period

Area or country	1996	1997	1998	1999 Mar.	1999 Apr.[r]	1999 May[r]	1999 June[r]	1999 July[r]	1999 Aug.[r]	1999 Sept.[p]
1 **Total, all foreigners**	**599,925**	**708,225**	**735,058[r]**	**710,938[r]**	**735,992**	**750,581**	**750,859**	**720,597**	**730,753**	**757,702**
2 **Foreign countries**	**597,321**	**705,762**	**731,441[r]**	**706,318[r]**	**730,739**	**746,094**	**746,786**	**716,190**	**727,597**	**754,112**
3 Europe	165,769	199,880	233,320[r]	226,489[r]	236,299	265,789	299,977	292,697	305,072	316,073
4 Austria	1,662	1,354	1,043	2,759	2,389	2,902	2,514	3,855	3,080	2,335
5 Belgium and Luxembourg	6,727	6,641	7,187	5,451	7,533	9,811	10,028	9,214	7,463	7,229
6 Denmark	492	980	2,383	1,619	2,297	2,141	1,901	1,763	1,442	1,756
7 Finland	971	1,233	1,070	1,351	1,349	1,480	1,730	2,197	1,915	1,855
8 France	15,246	16,239	15,251	15,227[r]	15,942	15,800	18,253	19,944	18,969	19,128
9 Germany	8,472	12,676	15,923[r]	16,873[r]	17,188	18,367	20,793	23,965	23,558	22,996
10 Greece	568	402	575	554	651	585	551	628	659	662
11 Italy	6,457	6,230	7,283	6,045[r]	6,727	6,434	6,783	7,451	7,747	7,957
12 Netherlands	7,117	6,141	5,697[r]	6,690	7,251	8,588	8,724	9,334	10,132	9,425
13 Norway	808	555	827	596	970	753	717	821	583	1,252
14 Portugal	418	777	669	1,205	1,060	1,134	1,122	1,056	1,222	1,342
15 Russia	1,669	1,248	789	971	787	1,016	768	831	782	814
16 Spain	3,211	2,942	5,735	3,041	2,949	4,516	6,178	4,606	3,700	5,107
17 Sweden	1,739	1,854	4,223	4,439	4,141	2,950	3,005	3,199	4,082	4,184
18 Switzerland	19,798	28,846	46,874[r]	51,670[r]	48,468	65,488	75,544	66,927	71,866	90,187
19 Turkey	1,109	1,558	1,982	2,078	1,943	1,918	2,288	2,219	2,268	2,383
20 United Kingdom	85,234	103,143	106,349	97,286[r]	105,248	112,946	130,859	125,262	137,636	129,293
21 Yugoslavia[2]	115	52	53	54	55	54	54	50	49	50
22 Other Europe and other former U.S.S.R.[3]	3,956	7,009	9,407	8,580	9,351	8,906	8,165	9,375	7,919	8,118
23 Canada	26,436	27,189	47,036[r]	41,245[r]	40,726	41,116	37,454	31,957	32,109	36,460
24 Latin America and Caribbean	274,153	343,730	342,720[r]	341,482[r]	365,185	352,496	326,063	311,721	310,159	320,973
25 Argentina	7,400	8,924	9,553	10,399	10,075	10,318	10,776	10,482	10,257	10,274
26 Bahamas	71,871	89,379	96,455	88,657[r]	84,023	78,480	71,996	77,049	77,674	85,403
27 Bermuda	4,129	8,782	5,011[r]	4,096	4,426	6,276	6,111	7,813	9,747	8,481
28 Brazil	17,259	21,696	16,213[r]	15,165[r]	14,803	14,893	14,870	14,629	13,844	14,010
29 British West Indies	105,510	145,471	153,749[r]	162,891[r]	193,351	184,978	166,508	146,859	137,212	142,502
30 Chile	5,136	7,913	8,255[r]	8,082	7,810	7,545	7,531	7,153	6,900	6,808
31 Colombia	6,247	6,945	6,523	6,223[r]	6,106	5,877	5,570	5,590	5,046	4,818
32 Cuba	0	0	0	0	0	0	0	0	0	0
33 Ecuador	1,031	1,311	1,400	1,219	1,135	1,104	1,069	993	889	844
34 Guatemala	620	886	1,127	1,052	1,062	1,157	1,033	1,075	1,053	1,064
35 Jamaica	345	424	239	318	326	327	303	311	322	330
36 Mexico	18,425	19,428	21,227[r]	20,568[r]	19,470	19,316	18,638	18,978	17,819	18,248
37 Netherlands Antilles	25,209	17,838	6,779	6,661	5,711	5,867	5,484	5,101	14,032	13,298
38 Panama	2,786	4,364	3,584	3,320	4,329	3,298	3,353	3,064	2,898	2,940
39 Peru	2,720	3,491	3,275[r]	3,232	3,111	3,053	2,975	2,710	2,516	2,531
40 Uruguay	589	629	1,126	838	772	724	1,050	1,105	1,049	946
41 Venezuela	1,702	2,129	3,089	3,506	3,138	3,245	3,479	3,501	3,460	3,330
42 Other	3,174	4,120	5,115[r]	5,255[r]	5,537	6,038	5,317	5,308	5,441	5,146
43 Asia	122,478	125,092	98,606[r]	88,119[r]	79,297	77,699	74,693	72,240	72,942	72,326
China										
44 Mainland	1,401	1,579	1,261[r]	3,348[r]	3,421	3,006	3,745	3,144	2,758	2,032
45 Taiwan	1,894	922	1,041	1,331	866	763	870	904	937	790
46 Hong Kong	12,802	13,991	9,080	8,024[r]	6,309	4,977	7,102	5,333	4,969	5,224
47 India	1,946	2,200	1,440	1,701	1,703	1,458	1,569	1,708	1,728	1,736
48 Indonesia	1,762	2,651	1,942[r]	1,897	1,911	2,061	1,760	1,791	1,711	1,689
49 Israel	633	768	1,166	1,082	803	1,236	1,955	1,433	1,669	951
50 Japan	59,967	59,549	46,712	40,031[r]	32,703	30,664	27,093	25,900	26,226	27,978
51 Korea (South)	18,901	18,162	8,289[r]	9,170[r]	11,160	12,326	11,317	12,753	12,194	11,064
52 Philippines	1,697	1,689	1,465	1,540	1,546	1,808	1,669	1,380	1,279	1,491
53 Thailand	2,679	2,259	1,807[r]	1,720	1,732	1,623	1,850	1,683	1,549	1,467
54 Middle Eastern oil-exporting countries[4]	10,424	10,790	16,130	12,151	11,669	10,569	10,127	9,396	10,906	11,250
55 Other	8,372	10,532	8,273	6,124	5,474	7,208	5,636	6,815	7,016	6,654
56 Africa	2,776	3,530	3,122	2,938	2,688	2,448	2,629	2,499	2,178	2,293
57 Egypt	247	247	257	260	228	221	241	252	209	225
58 Morocco	524	511	372	422	463	444	454	431	444	437
59 South Africa	584	805	643	798	567	640	724	598	449	506
60 Zaire	0	0	0	0	0	0	0	0	0	0
61 Oil-exporting countries[5]	420	1,212	936	325	257	288	340	297	280	323
62 Other	1,001	755	914	1,133	1,173	855	870	921	796	802
63 Other	5,709	6,341	6,637[r]	6,045	6,544	6,546	5,970	5,076	5,137	5,987
64 Australia	4,577	5,300	6,173[r]	5,638	6,060	6,093	5,636	4,811	4,907	5,770
65 Other	1,132	1,041	464	407	484	453	334	265	230	217
66 Nonmonetary international and regional organizations[6]	2,604	2,463	3,617	4,620	5,253	4,487	4,073	4,407	3,156	3,590

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.
2. Since December 1992, has excluded Bosnia, Croatia, and Slovenia.
3. Includes the Bank for International Settlements. Since December 1992, has included all parts of the former U.S.S.R. (except Russia), and Bosnia, Croatia, and Slovenia.
4. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
5. Comprises Algeria, Gabon, Libya, and Nigeria.
6. Excludes the Bank for International Settlements, which is included in "Other Europe."

3.19 BANKS' OWN AND DOMESTIC CUSTOMERS' CLAIMS ON FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Type of claim	1996	1997	1998[r]	1999						
				Mar.[r]	Apr.[r]	May[r]	June[r]	July[r]	Aug.[r]	Sept.[p]
1 **Total**	**743,919**	**852,852**	**875,920**	**862,902**	...	...	**898,428**	...	...	...
2 Banks' claims	599,925	708,225	735,058	710,938	735,992	750,581	750,859	720,597	730,753	757,702
3 Foreign public borrowers	22,216	20,581	23,540	34,752	35,787	36,616	37,344	38,465	35,689	34,997
4 Own foreign offices[2]	341,574	431,685	484,525	468,018	485,425	492,192	488,803	460,268	457,574	487,456
5 Unaffiliated foreign banks	113,682	109,230	106,281	94,029	93,733	99,864	104,102	99,715	108,931	102,017
6 Deposits	33,826	30,995	27,196	25,040	23,938	25,234	24,164	24,859	23,915	24,556
7 Other	79,856	78,235	79,085	68,989	69,795	74,630	79,938	74,856	85,016	77,461
8 All other foreigners	122,453	146,729	120,712	114,139	121,047	121,909	120,610	122,149	128,559	133,232
9 Claims of banks' domestic customers[3]	143,994	144,627	140,862	151,964	...	...	147,569	...	...	...
10 Deposits	77,657	73,110	78,491	91,380	...	...	93,597	...	...	...
11 Negotiable and readily transferable instruments[4]	51,207	53,967	48,752	47,990	...	...	43,616	...	...	...
12 Outstanding collections and other claims	15,130	17,550	13,619	12,594	...	...	10,356	...	...	...
MEMO										
13 Customer liability on acceptances	10,388	9,624	4,519	4,485	...	...	4,437	...	...	...
14 Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	39,661	33,816	39,978	33,038	33,474	31,210	29,165	32,857	32,336	27,750

1. For banks' claims, data are monthly; for claims of banks' domestic customers, data are for quarter ending with month indicated.

Reporting banks include all types of depository institution as well as some brokers and dealers.

2. For U.S. banks, includes amounts due from own foreign branches and foreign subsidiaries consolidated in quarterly Consolidated Reports of Condition filed with bank regulatory agencies. For agencies, branches, and majority-owned subsidiaries of foreign banks, consists principally of amounts due from the head office or parent foreign bank, and from foreign branches, agencies, or wholly owned subsidiaries of the head office or parent foreign bank.

3. Assets held by reporting banks in the accounts of their domestic customers.

4. Principally negotiable time certificates of deposit, bankers acceptances, and commercial paper.

5. Includes demand and time deposits and negotiable and nonnegotiable certificates of deposit denominated in U.S. dollars issued by banks abroad.

3.20 BANKS' OWN CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Maturity, by borrower and area[2]	1995	1996	1997	1998		1999	
				Sept.	Dec.	Mar.	June[p]
1 **Total**	**224,932**	**258,106**	**276,550**	**281,342**	**250,547**	**242,463**	**259,219**
By borrower							
2 Maturity of one year or less	178,857	211,859	205,781	208,710	186,653	175,490	186,868
3 Foreign public borrowers	14,995	15,411	12,081	14,842	13,699	20,921	24,558
4 All other foreigners	163,862	196,448	193,700	193,868	172,954	154,569	162,310
5 Maturity of more than one year	46,075	46,247	70,769	72,632	63,894	66,973	72,351
6 Foreign public borrowers	7,522	6,790	8,499	10,926	9,840	13,290	11,657
7 All other foreigners	38,553	39,457	62,270	61,706	54,054	53,683	60,694
By area							
Maturity of one year or less							
8 Europe	55,622	55,690	58,294	68,980	68,684	66,887	84,731
9 Canada	6,751	8,339	9,917	8,795	10,947	7,816	6,690
10 Latin America and Caribbean	72,504	103,254	97,207	100,161	81,911	71,214	65,853
11 Asia	40,296	38,078	33,964	22,320	18,005	21,347	21,957
12 Africa	1,295	1,316	2,211	1,762	1,835	1,571	1,543
13 All other[3]	2,389	5,182	4,188	6,692	5,271	6,655	6,094
Maturity of more than one year							
14 Europe	4,995	6,965	13,240	15,264	14,923	16,949	18,754
15 Canada	2,751	2,645	2,525	2,982	3,140	2,781	3,276
16 Latin America and Caribbean	27,681	24,943	42,049	39,165	33,443	33,539	36,902
17 Asia	7,941	9,392	10,235	12,147	10,018	10,972	10,471
18 Africa	1,421	1,361	1,236	1,170	1,233	1,160	1,105
19 All other[3]	1,286	941	1,484	1,904	1,137	1,572	1,843

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.

2. Maturity is time remaining until maturity.

3. Includes nonmonetary international and regional organizations.

3.21 CLAIMS ON FOREIGN COUNTRIES Held by U.S. and Foreign Offices of U.S. Banks[1]

Billions of dollars, end of period

Area or country	1995	1996	1997			1998				1999	
			June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June[p]
1 **Total**	**551.9**	**645.3**	**678.8**	**711.0**	**719.3**	**739.1**	**749.7**	**738.9**	**714.1**	**678.3**	**667.3**
2 G-10 countries and Switzerland	206.0	228.3	250.0	247.8	242.8	249.0	278.3	268.3	255.8	246.4	255.7
3 Belgium and Luxembourg	13.6	11.7	9.4	11.4	11.0	11.2	16.2	15.1	13.4	14.1	14.8
4 France	19.4	16.6	17.9	20.2	15.4	15.5	20.5	19.9	18.4	19.5	18.4
5 Germany	27.3	29.8	34.1	34.7	28.6	25.5	28.8	28.9	31.1	32.0	29.2
6 Italy	11.5	16.0	20.2	19.3	15.5	19.7	19.5	18.0	11.5	13.2	11.6
7 Netherlands	3.7	4.0	6.4	7.2	6.2	7.3	8.3	8.1	7.9	8.9	10.9
8 Sweden	2.7	2.6	3.6	4.1	3.3	4.8	3.1	2.2	2.3	3.6	2.3
9 Switzerland	6.7	5.3	5.4	4.8	7.2	5.6	6.9	7.5	8.3	7.3	7.8
10 United Kingdom	82.4	104.7	110.6	108.3	113.4	120.1	134.9	130.4	121.5	110.6	122.7
11 Canada	10.3	14.0	15.7	15.1	13.7	13.5	16.5	15.6	16.7	15.7	16.5
12 Japan	28.5	23.7	26.8	22.6	28.6	25.8	23.7	22.8	24.7	21.3	21.6
13 Other industrialized countries	50.2	65.7	71.7	73.8	64.5	74.3	72.1	71.6	68.5	75.8	76.5
14 Austria	.9	1.1	1.5	1.7	1.5	1.7	1.9	2.1	1.4	2.5	2.7
15 Denmark	2.6	1.5	2.8	3.7	2.4	2.0	2.1	2.8	2.2	3.2	2.8
16 Finland	.8	.8	1.4	1.9	1.3	1.5	1.4	1.6	1.5	1.4	.8
17 Greece	5.7	6.7	6.1	6.2	5.1	6.1	5.8	5.8	6.0	6.2	5.7
18 Norway	3.2	8.0	4.7	4.6	3.6	4.0	3.4	3.3	3.2	2.9	2.9
19 Portugal	1.3	.9	1.1	1.4	.9	.7	1.3	1.1	1.3	1.3	1.2
20 Spain	11.6	13.2	15.4	13.9	11.7	16.5	15.2	17.5	13.6	14.3	15.8
21 Turkey	1.9	2.7	3.4	4.4	4.5	4.9	6.5	5.2	4.8	5.0	4.7
22 Other Western Europe	4.7	4.7	5.5	6.1	8.2	9.9	9.6	10.3	10.6	10.1	10.1
23 South Africa	1.2	2.0	1.9	1.9	2.2	3.7	5.0	3.7	3.5	3.4	3.4
24 Australia	16.4	24.0	27.8	28.0	23.1	23.2	20.0	18.2	20.3	25.3	26.5
25 OPEC[2]	22.1	19.7	22.3	22.9	26.0	25.7	25.3	25.9	27.1	26.0	25.9
26 Ecuador	.7	1.1	.9	1.2	1.3	1.3	1.2	1.2	1.2	1.1	1.0
27 Venezuela	2.7	2.4	2.1	2.2	2.5	3.3	3.2	3.1	3.2	3.4	3.1
28 Indonesia	4.8	5.2	5.6	6.5	6.7	5.5	5.1	4.7	4.8	4.5	4.9
29 Middle East countries	13.3	10.7	12.5	11.8	14.4	14.3	15.5	16.1	17.0	16.6	16.4
30 African countries	.6	.4	1.2	1.1	1.2	1.4	.3	.8	1.0	.4	.4
31 Non-OPEC developing countries	112.6	130.3	140.6	137.0	138.7	147.4	141.7	140.6	147.9	143.7	145.3
Latin America											
32 Argentina	12.9	14.3	16.4	17.1	18.4	19.3	20.2	22.3	22.3	23.5	22.0
33 Brazil	13.7	20.7	27.3	26.1	28.6	32.4	27.2	24.9	24.2	23.6	24.7
34 Chile	6.8	7.0	7.6	8.0	8.7	9.0	9.1	9.3	8.3	8.5	8.2
35 Colombia	2.9	4.1	3.3	3.4	3.4	3.3	3.6	3.4	3.2	3.2	3.1
36 Mexico	17.3	16.2	16.6	16.4	17.4	17.7	17.9	18.4	25.3	18.9	18.0
37 Peru	.8	1.6	1.4	1.8	2.0	2.1	2.2	2.2	2.2	2.2	2.1
38 Other	2.8	3.3	3.4	3.6	4.1	4.0	4.4	4.6	5.4	5.4	5.5
Asia											
China											
39 Mainland	1.8	2.5	3.6	4.3	3.2	4.2	3.9	2.8	3.0	5.1	5.3
40 Taiwan	9.4	10.3	10.6	9.7	9.0	11.7	11.3	12.2	12.8	11.7	11.9
41 India	4.4	4.3	5.3	4.9	4.9	5.0	4.9	5.3	5.3	5.5	6.5
42 Israel	.5	.5	.8	1.0	.7	.7	.9	.9	1.1	1.1	2.0
43 Korea (South)	19.1	21.5	16.3	16.2	15.6	16.2	14.5	12.9	13.7	13.3	14.9
44 Malaysia	4.4	6.0	6.4	5.6	5.1	4.5	4.7	5.1	5.7	5.9	5.9
45 Philippines	4.1	5.8	7.0	5.7	5.7	5.0	5.4	4.7	5.1	5.3	5.6
46 Thailand	4.9	5.7	7.3	6.2	5.4	5.5	4.9	5.3	4.6	4.5	4.1
47 Other Asia	4.5	4.1	4.7	4.5	4.3	4.2	3.7	3.1	2.9	3.0	2.8
Africa											
48 Egypt	.4	.7	1.1	.9	.9	1.0	1.5	1.7	1.3	1.4	1.4
49 Morocco	.7	.7	.7	.7	.6	.6	.6	.5	.5	.5	.5
50 Zaire	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
51 Other Africa[3]	.9	.9	.9	.9	.8	1.1	.8	1.1	1.0	1.2	.9
52 Eastern Europe	4.2	6.9	7.1	9.8	9.1	12.0	10.9	6.0	5.2	6.1	5.1
53 Russia[4]	1.0	3.7	4.2	5.1	5.1	7.5	6.8	2.8	2.2	2.2	1.9
54 Other	3.2	3.2	2.9	4.7	4.0	4.6	4.1	3.2	3.1	3.9	3.2
55 Offshore banking centers	99.2	134.7	129.6	138.9	139.0	129.3	125.8	121.9	94.1	83.0	70.6
56 Bahamas	11.0	20.3	16.1	19.8	23.3	29.2	24.7	29.0	33.0	30.2	16.1
57 Bermuda	6.3	4.5	7.9	9.8	9.8	9.0	9.3	10.4	4.6	3.8	5.6
58 Cayman Islands and other British West Indies	32.4	37.2	35.1	45.7	43.4	24.9	34.2	30.6	15.4	6.3	7.0
59 Netherlands Antilles	10.3	26.1	15.8	21.7	14.6	14.0	10.5	6.0	2.6	2.7	1.2
60 Panama[5]	1.4	2.0	2.6	2.1	3.1	3.2	3.3	4.0	3.9	3.9	3.9
61 Lebanon	.1	.1	.1	.1	.1	.1	.1	.2	.1	.1	.1
62 Hong Kong, China	25.0	27.9	35.2	27.2	32.2	33.8	30.0	30.6	23.4	22.8	21.9
63 Singapore	13.1	16.7	16.7	12.7	12.7	15.0	13.5	11.1	11.2	13.1	14.6
64 Other[6]	.1	.1	.3	.1	.1	.1	.2	.2	.2	.2	.1
65 Miscellaneous and unallocated[7]	57.6	59.6	57.6	80.8	99.1	101.3	95.7	104.5	115.5	97.3	88.1

1. The banking offices covered by these data include U.S. offices and foreign branches of U.S. banks, including U.S. banks that are subsidiaries of foreign banks. Offices not covered include U.S. agencies and branches of foreign banks. Beginning March 1994, the data include large foreign subsidiaries of U.S. banks. The data also include other types of U.S. depository institutions as well as some types of brokers and dealers. To eliminate duplication, the data are adjusted to exclude the claims on foreign branches held by a U.S. office or another foreign branch of the same banking institution.

These data are on a gross claims basis and do not necessarily reflect the ultimate country risk or exposure of U.S. banks. More complete data on the country risk exposure of U.S. banks are available in the quarterly *Country Exposure Lending Survey* published by the Federal Financial Institutions Examination Council.

2. Organization of Petroleum Exporting Countries, shown individually; other members of OPEC (Algeria, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, and United Arab Emirates); and Bahrain and Oman (not formally members of OPEC).

3. Excludes Liberia. Beginning March 1994 includes Namibia.

4. As of December 1992, excludes other republics of the former Soviet Union.

5. Includes Canal Zone.

6. Foreign branch claims only.

7. Includes New Zealand, Liberia, and international and regional organizations.

3.22 LIABILITIES TO UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

	Type of liability, and area or country	1995	1996	1997	1998				1999	
					Mar.	June	Sept.	Dec.	Mar.	June[p]
1	**Total**	**46,448**	**61,782**	**57,382**	**55,681**	**51,433**	**49,279**	**46,570**	**46,663**	**49,337**
2	Payable in dollars	33,903	39,542	41,543	41,601	40,026	38,410	36,668	34,030	36,032
3	Payable in foreign currencies	12,545	22,240	15,839	14,080	11,407	10,869	9,902	12,633	13,305
	By type									
4	Financial liabilities	24,241	33,049	26,877	25,691	22,322	19,331	19,255	22,458	25,058
5	Payable in dollars	12,903	11,913	12,630	12,911	11,988	9,812	10,371	11,225	13,205
6	Payable in foreign currencies	11,338	21,136	14,247	12,780	10,334	9,519	8,884	11,233	11,853
7	Commercial liabilities	22,207	28,733	30,505	29,990	29,111	29,948	27,315	24,205	24,279
8	Trade payables	11,013	12,720	10,904	10,107	9,537	10,276	10,978	9,999	10,935
9	Advance receipts and other liabilities	11,194	16,013	19,601	19,883	19,574	19,672	16,337	14,206	13,344
10	Payable in dollars	21,000	27,629	28,913	28,690	28,038	28,598	26,297	22,805	22,827
11	Payable in foreign currencies	1,207	1,104	1,592	1,300	1,073	1,350	1,018	1,400	1,452
	By area or country									
	Financial liabilities									
12	Europe	15,622	23,179	18,027	18,793	15,468	12,905	12,589	16,098	19,578
13	Belgium and Luxembourg	369	632	186	127	75	150	79	50	70
14	France	999	1,091	1,425	1,545	1,699	1,457	1,097	1,178	1,287
15	Germany	1,974	1,834	1,958	2,518	2,441	2,167	2,063	1,906	1,959
16	Netherlands	466	556	494	472	484	417	1,406	1,337	2,104
17	Switzerland	895	699	561	130	189	179	155	141	143
18	United Kingdom	10,138	17,161	11,667	12,185	8,765	6,610	5,980	9,729	13,097
19	Canada	632	1,401	2,374	1,027	539	389	693	781	320
20	Latin America and Caribbean	1,783	1,668	1,386	965	1,320	1,351	1,495	1,528	1,369
21	Bahamas	59	236	141	17	6	1	7	1	1
22	Bermuda	147	50	229	86	49	73	101	78	52
23	Brazil	57	78	143	91	76	154	152	137	131
24	British West Indies	866	1,030	604	517	845	834	957	1,064	944
25	Mexico	12	17	26	21	51	23	59	22	19
26	Venezuela	2	1	1	1	1	1	2	2	1
27	Asia	5,988	6,423	4,387	4,197	4,315	4,005	3,785	3,475	3,217
28	Japan	5,436	5,869	4,102	3,964	3,869	3,754	3,612	3,337	3,035
29	Middle Eastern oil-exporting countries[1]	27	25	27	18	0	0	0	1	2
30	Africa	150	38	60	33	29	31	28	31	29
31	Oil-exporting countries[2]	122	0	0	0	0	0	0	2	0
32	All other[3]	66	340	643	676	651	650	665	545	545
	Commercial liabilities									
33	Europe	7,700	9,767	10,228	9,951	9,987	11,010	10,030	8,580	8,718
34	Belgium and Luxembourg	331	479	666	565	557	623	278	229	189
35	France	481	680	764	840	612	740	920	654	656
36	Germany	767	1,002	1,274	1,068	1,219	1,408	1,392	1,088	1,143
37	Netherlands	500	766	439	443	485	440	429	361	432
38	Switzerland	413	624	375	407	349	507	499	535	497
39	United Kingdom	3,568	4,303	4,086	4,041	3,743	4,286	3,697	3,008	2,959
40	Canada	1,040	1,090	1,175	1,347	1,206	1,504	1,390	1,597	1,670
41	Latin America and Caribbean	1,740	2,574	2,176	2,051	2,285	1,840	1,618	1,612	1,674
42	Bahamas	1	63	16	27	14	48	14	11	19
43	Bermuda	205	297	203	174	209	168	198	225	180
44	Brazil	98	196	220	249	246	256	152	107	112
45	British West Indies	56	14	12	5	27	5	10	7	5
46	Mexico	416	665	565	520	557	511	347	437	490
47	Venezuela	221	328	261	219	196	230	202	155	149
48	Asia	10,421	13,422	14,966	14,672	13,611	13,539	12,342	10,428	10,039
49	Japan	3,315	4,614	4,500	4,372	3,995	3,779	3,827	2,715	2,753
50	Middle Eastern oil-exporting countries[1]	1,912	2,168	3,111	3,138	3,194	3,582	2,852	2,479	2,209
51	Africa	619	1,040	874	833	921	810	794	727	832
52	Oil-exporting countries[2]	254	532	408	376	354	372	393	377	392
53	Other[3]	687	840	1,086	1,136	1,101	1,245	1,141	1,261	1,346

1. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

2. Comprises Algeria, Gabon, Libya, and Nigeria.

3. Includes nonmonetary international and regional organizations.

3.23 CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

	Type of claim, and area or country	1995	1996	1997	1998				1999	
					Mar.	June	Sept.	Dec.	Mar.	June[p]
1	**Total**	**52,509**	**65,897**	**68,128**	**71,004**	**63,188**	**67,976**	**77,462**	**68,973**	**63,767**
2	Payable in dollars	48,711	59,156	62,173	65,359	57,587	62,034	72,171	63,988	56,931
3	Payable in foreign currencies	3,798	6,741	5,955	5,645	5,601	5,942	5,291	4,985	6,836
	By type									
4	Financial claims	27,398	37,523	36,959	40,301	32,341	37,262	46,260	38,136	31,877
5	Deposits	15,133	21,624	22,909	20,863	14,762	15,406	30,199	18,686	13,350
6	Payable in dollars	14,654	20,852	21,060	19,155	13,084	13,374	28,549	17,101	11,636
7	Payable in foreign currencies	479	772	1,849	1,708	1,678	2,032	1,650	1,585	1,714
8	Other financial claims	12,265	15,899	14,050	19,438	17,579	21,856	16,061	19,450	18,527
9	Payable in dollars	10,976	12,374	11,806	16,981	14,904	19,867	14,049	17,419	14,762
10	Payable in foreign currencies	1,289	3,525	2,244	2,457	2,675	1,989	2,012	2,031	3,765
11	Commercial claims	25,111	28,374	31,169	30,703	30,847	30,714	31,202	30,837	31,890
12	Trade receivables	22,998	25,751	27,536	26,888	26,764	26,330	27,202	26,724	27,754
13	Advance payments and other claims	2,113	2,623	3,633	3,815	4,083	4,384	4,000	4,113	4,136
14	Payable in dollars	23,081	25,930	29,307	29,223	29,599	28,793	29,573	29,468	30,533
15	Payable in foreign currencies	2,030	2,444	1,862	1,480	1,248	1,921	1,629	1,369	1,357
	By area or country									
	Financial claims									
16	Europe	7,609	11,085	14,999	14,187	14,091	14,473	12,294	12,800	13,898
17	Belgium and Luxembourg	193	185	406	378	518	496	661	469	457
18	France	803	694	1,015	902	796	1,140	864	913	1,368
19	Germany	436	276	427	393	290	359	304	302	367
20	Netherlands	517	493	677	911	975	867	875	955	959
21	Switzerland	498	474	434	401	403	409	414	530	504
22	United Kingdom	4,303	7,922	10,337	9,289	9,639	9,849	7,766	8,357	8,589
23	Canada	2,851	3,442	3,313	4,688	3,020	4,090	2,503	3,111	2,828
24	Latin America and Caribbean	14,500	20,032	15,543	18,207	11,967	15,758	27,714	18,825	11,486
25	Bahamas	1,965	1,553	2,308	1,316	1,306	2,105	403	666	467
26	Bermuda	81	140	108	66	48	63	39	41	39
27	Brazil	830	1,468	1,313	1,408	1,394	710	835	1,112	1,102
28	British West Indies	10,393	15,536	10,462	13,551	7,349	10,960	24,388	14,621	7,393
29	Mexico	554	457	537	967	1,089	1,122	1,245	1,583	1,702
30	Venezuela	32	31	36	47	57	50	55	72	71
31	Asia	1,579	2,221	2,133	2,174	2,376	2,121	3,027	2,648	2,801
32	Japan	871	1,035	823	791	886	928	1,194	942	949
33	Middle Eastern oil-exporting countries[1]	3	22	11	9	12	13	9	8	5
34	Africa	276	174	319	325	155	157	159	174	228
35	Oil-exporting countries[2]	5	14	15	16	15	16	16	26	5
36	All other[3]	583	569	652	720	732	663	563	578	636
	Commercial claims									
37	Europe	9,824	10,443	12,120	12,854	12,882	13,029	13,246	12,782	12,958
38	Belgium and Luxembourg	231	226	328	232	216	219	238	281	286
39	France	1,830	1,644	1,796	1,939	1,955	2,098	2,171	2,173	2,092
40	Germany	1,070	1,337	1,614	1,670	1,757	1,502	1,822	1,599	1,660
41	Netherlands	452	562	597	534	492	463	467	415	389
42	Switzerland	520	642	554	476	418	546	483	367	385
43	United Kingdom	2,656	2,946	3,660	4,828	4,664	4,681	4,769	4,529	4,615
44	Canada	1,951	2,165	2,660	2,882	2,779	2,291	2,617	2,983	2,844
45	Latin America and Caribbean	4,364	5,276	5,750	5,481	6,082	5,773	6,296	5,930	6,267
46	Bahamas	30	35	27	13	12	39	24	10	21
47	Bermuda	272	275	244	238	359	173	536	500	583
48	Brazil	898	1,303	1,162	1,128	1,183	1,062	1,024	936	885
49	British West Indies	79	190	109	88	110	91	104	117	127
50	Mexico	993	1,128	1,392	1,302	1,462	1,356	1,545	1,431	1,474
51	Venezuela	285	357	576	441	585	566	401	361	383
52	Asia	7,312	8,376	8,713	7,638	7,367	7,190	7,192	7,080	7,678
53	Japan	1,870	2,003	1,976	1,713	1,757	1,789	1,681	1,486	1,509
54	Middle Eastern oil-exporting countries[1]	974	971	1,107	987	1,127	967	1,135	1,286	1,465
55	Africa	654	746	680	613	657	740	711	685	738
56	Oil-exporting countries[2]	87	166	119	122	116	128	165	116	202
57	Other[3]	1,006	1,368	1,246	1,235	1,080	1,691	1,140	1,377	1,405

1. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
2. Comprises Algeria, Gabon, Libya, and Nigeria.
3. Includes nonmonetary international and regional organizations.

3.24 FOREIGN TRANSACTIONS IN SECURITIES

Millions of dollars

Transaction, and area or country	1997	1998	1999 Jan.–Sept.	1999 Mar.	Apr.	May[r]	June[r]	July[r]	Aug.[r]	Sept.[p]
	U.S. corporate securities									
STOCKS										
1 Foreign purchases	1,097,958	1,574,185	1,626,045	179,801[r]	222,900[r]	185,646	179,785	188,099	178,428	175,555
2 Foreign sales	1,028,361	1,524,189	1,553,504	176,840[r]	205,307[r]	177,108	167,878	179,783	166,212	172,173
3 **Net purchases, or sales (−)**	**69,597**	**49,996**	**72,541**	**2,961[r]**	**17,593[r]**	**8,538**	**11,907**	**8,316**	**12,216**	**3,382**
4 **Foreign countries**	**69,754**	**50,376**	**72,547**	**2,961[r]**	**17,577[r]**	**8,549**	**11,893**	**8,361**	**12,225**	**3,367**
5 Europe	62,688	68,124	66,412	6,563	11,493	5,260	7,663	6,171	9,568	7,243
6 France	6,641	5,672	3,168	1,199	534	−206	919	−55	269	146
7 Germany	9,059	9,195	7,627	480	1,814	971	1,376	−354	1,322	111
8 Netherlands	3,831	8,249	4,914	1,103	417	738	1,181	404	566	−537
9 Switzerland	7,848	5,001	5,180	1,551	1,934	481	1,452	−2,822	827	1,185
10 United Kingdom	22,478	23,952	32,036	575	3,758	1,822	1,300	8,498	4,578	4,779
11 Canada	−1,406	−4,689	988	723	−129	−159	401	153	−50	−927
12 Latin America and Caribbean	5,203	760	5,356	−1,341[r]	5,596[r]	2,049	2,474	2,935	846	−4,687
13 Middle East[1]	383	−1,449	−319	298	−355	419	64	−273	174	−26
14 Other Asia	2,072	−12,347	−985	−3,257	905	574	1,271	−671	1,666	1,463
15 Japan	4,787	−1,171	3,187	−1,925	1,458	464	681	−452	1,269	2,652
16 Africa	472	639	412	87	37	138	81	14	−39	61
17 Other countries	342	−662	683	−112	30	268	−61	32	60	240
18 **Nonmonetary international and regional organizations**	**−157**	**−380**	**−6**	**0**	**16**	**−11**	**14**	**−45**	**−9**	**15**
BONDS[2]										
19 Foreign purchases	610,116	905,782	641,321	77,101	70,044	66,558	67,569	75,778	64,113	76,270
20 Foreign sales	475,958	727,044	454,837	52,331	47,516	49,145	52,197	47,984	46,667	48,902
21 **Net purchases, or sales (−)**	**134,158**	**178,738**	**186,484**	**24,770**	**22,528**	**17,413**	**15,372**	**27,794**	**17,446**	**27,368**
22 **Foreign countries**	**133,595**	**179,081**	**185,932**	**24,974**	**22,468**	**17,326**	**15,383**	**27,520**	**17,473**	**27,037**
23 Europe	71,631	130,057	105,118	12,832	10,527	10,911	9,553	18,196	10,208	13,724
24 France	3,300	3,386	1,496	22	−36	352	258	447	160	24
25 Germany	2,742	4,369	5,313	190	−43	797	321	1,707	−77	752
26 Netherlands	3,576	3,443	2,027	418	106	168	187	336	144	279
27 Switzerland	187	4,826	3,302	272	467	128	−26	705	322	496
28 United Kingdom	54,134	99,637	78,568	9,268	8,617	8,310	7,651	13,582	7,960	9,766
29 Canada	6,264	6,121	3,302	640	319	413	184	−23	286	908
30 Latin America and Caribbean	34,733	23,938	43,730	5,203	5,967	3,382	4,603	5,088	5,558	5,490
31 Middle East[1]	2,155	4,997	1,998	859	364	−717	−114	−182	−219	257
32 Other Asia	16,996	12,662	30,174	5,132	4,904	3,224	1,458	4,031	1,179	6,698
33 Japan	9,357	8,384	11,062	589	1,215	0	310	3,020	827	4,375
34 Africa	1,005	190	665	261	331	82	−307	122	59	−189
35 Other countries	811	1,116	945	47	56	31	6	288	402	149
36 **Nonmonetary international and regional organizations**	**563**	**−343**	**552**	**−204**	**60**	**87**	**−11**	**274**	**−27**	**331**
	Foreign securities									
37 Stocks, net purchases, or sales (−)	−40,942	6,227	21,728	1,783[r]	5,503[r]	2,455	6,220	−2,236	594	1,058
38 Foreign purchases	756,015	929,923	825,442	95,302[r]	98,607[r]	86,345	97,622	106,264	91,851	97,463
39 Foreign sales	796,957	923,696	803,714	93,519[r]	93,104[r]	83,890	91,402	108,500	91,257	96,405
40 Bonds, net purchases, or sales (−)	−48,171	−17,350	−7,592	1,710	−5,147	−499	8,969	−4,777	−6,421	1,132
41 Foreign purchases	1,451,704	1,328,281	623,857	76,129	73,376	72,372	79,013	63,975	70,061	66,661
42 Foreign sales	1,499,875	1,345,631	631,449	74,419	78,523	72,871	70,044	68,752	76,482	65,529
43 **Net purchases, or sales (−), of stocks and bonds**	**−89,113**	**−11,123**	**14,136**	**3,493[r]**	**356[r]**	**1,956**	**15,189**	**−7,013**	**−5,827**	**2,190**
44 **Foreign countries**	**−88,921**	**−10,778**	**13,823**	**3,533[r]**	**474[r]**	**2,056**	**15,219**	**−7,104**	**−6,010**	**2,260**
45 Europe	−29,874	12,632	49,796	14,026[r]	9,710	5,845	16,749	−3,759	−1,829	2,217
46 Canada	−3,085	−1,901	−1,003	−131	−449	−537	1,202	−1,055	525	303
47 Latin America and Caribbean	−25,258	−13,798	−9,678	−3,660[r]	−4,433[r]	−2,351	−2,785	445	−299	601
48 Asia	−25,123	−3,992	−24,146	−7,155	−3,946	−494	194	−3,330	−4,303	−210
49 Japan	−10,001	−1,742	−25,582	−7,250	−3,445	−704	−1,241	−4,323	−4,805	−565
50 Africa	−3,293	−1,225	−45	−16	20	112	−25	−21	4	−116
51 Other countries	−2,288	−2,494	−1,101	469	−428	−519	−116	616	−108	−535
52 **Nonmonetary international and regional organizations**	**−192**	**−345**	**313**	**−40**	**−118**	**−100**	**−30**	**91**	**183**	**−70**

1. Comprises oil-exporting countries as follows: Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

2. Includes state and local government securities and securities of U.S. government agencies and corporations. Also includes issues of new debt securities sold abroad by U.S. corporations organized to finance direct investments abroad.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions[1]

Millions of dollars; net purchases, or sales (−) during period

Area or country	1997	1998	1999	1999						
			Jan.–Sept.	Mar.	Apr.	May	June	July	Aug.	Sept.[p]
1 **Total estimated**	**184,171**	**49,039**	**−1,256**	**1,532**	**−3,271**	**5,638**	**−609**	**−6,242**	**19,118**	**87**
2 Foreign countries	183,688	46,570	−1,387	1,762	−3,257	5,316	−815	−6,226	18,847	−4
3 Europe	144,921	23,797	−40,937	1,342	−15,394	−3,997	−5,796	−5,740	1,771	−9,268
4 Belgium and Luxembourg	3,427	3,805	1,425	−54	476	121	753	37	105	12
5 Germany	22,471	144	1,090	428	−653	−290	538	643	1,438	−963
6 Netherlands	1,746	−5,533	1,364	197	−256	797	−77	−1,224	453	−423
7 Sweden	−465	1,486	1,019	386	−462	−21	579	−229	876	−45
8 Switzerland	6,028	5,240	−3,677	−1,457	−302	−121	971	−216	−714	234
9 United Kingdom	98,253	14,384	−20,734	1,129	−6,672	−4,528	−7,215	1,385	1,934	−3,534
10 Other Europe and former U.S.S.R.	13,461	4,271	−21,424	713	−7,525	45	−1,345	−6,136	−2,321	−4,549
11 Canada	−811	615	8,336	213	1,205	2,580	460	1,382	1,339	1,459
12 Latin America and Caribbean	−2,554	−3,662	6,994	1,100	5,200	1,364	−1,403	693	8,695	3,003
13 Venezuela	655	59	216	−445	2	88	−31	131	15	10
14 Other Latin America and Caribbean	−549	9,523	1,495	−2,570	3,654	−123	−52	−43	1,650	2,982
15 Netherlands Antilles	−2,660	−13,244	5,283	4,115	1,544	1,399	−1,320	605	7,030	11
16 Asia	39,567	27,433	25,329	−1,714	5,973	5,631	6,489	−2,319	6,832	5,344
17 Japan	20,360	13,048	15,873	−1,311	6,475	1,284	4,905	−394	2,913	5,259
18 Africa	1,524	751	−1,598	−52	−11	−198	−246	−178	−622	−302
19 Other	1,041	−2,364	489	873	−230	−64	−319	−64	832	−240
20 Nonmonetary international and regional organizations	483	2,469	131	−230	−14	322	206	−16	271	91
21 International	621	1,502	−194	−206	15	223	−8	−101	233	98
22 Latin American regional	170	199	670	−5	0	122	192	191	175	−9
MEMO										
23 Foreign countries	183,688	46,570	−1,387	1,762	−3,257	5,316	−815	−6,226	18,847	−4
24 Official institutions	43,959	4,123	−11,333	−4,845	−6,696	3,223	397	−1,773	2,393	−1,796
25 Other foreign	139,729	42,447	9,946	6,607	3,439	2,093	−1,212	−4,453	16,454	1,792
Oil-exporting countries										
26 Middle East[2]	7,636	−16,554	7,612	1,478	65	2,887	238	−38	130	401
27 Africa[3]	−12	2	1	0	0	0	0	0	1	0

1. Official and private transactions in marketable U.S. Treasury securities having an original maturity of more than one year. Data are based on monthly transactions reports. Excludes nonmarketable U.S. Treasury bonds and notes held by official institutions of foreign countries.

2. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

3. Comprises Algeria, Gabon, Libya, and Nigeria.

3.28 FOREIGN EXCHANGE RATES AND INDEXES OF THE FOREIGN EXCHANGE VALUE OF THE U.S. DOLLAR[1]

Currency units per dollar except as noted

Item	1996	1997	1998	1999					
				June	July	Aug.	Sept.	Oct.	Nov.
	Exchange Rates								
COUNTRY/CURRENCY UNIT									
1 Australia/dollar[2]	78.28	74.37	62.91	65.63	65.62	64.46	64.95	65.09	63.88
2 Austria/schilling	10.589	12.206	12.379	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3 Belgium/franc	30.97	35.81	36.31	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4 Brazil/real	1.0051	1.0779	1.1605	1.7669	1.8023	1.8859	1.8987	1.9688	1.9314
5 Canada/dollar	1.3638	1.3849	1.4836	1.4695	1.4890	1.4932	1.4771	1.4776	1.4674
6 China, P.R./yuan	8.3389	8.3193	8.3008	8.2780	8.2776	8.2772	8.2774	8.2775	8.2782
7 Denmark/krone	5.8003	6.6092	6.7030	7.1643	7.1792	7.0144	7.0828	6.9450	7.2019
8 European Monetary Union/euro[3]	n.a.	n.a.	n.a.	1.0377	1.0370	1.0605	1.0497	1.0706	1.0328
9 Finland/markka	4.5948	5.1956	5.3473	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 France/franc	5.1158	5.8393	5.8995	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11 Germany/deutsche mark	1.5049	1.7348	1.7597	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 Greece/drachma	240.82	273.28	295.70	312.49	313.52	307.84	311.68	307.71	318.24
13 Hong Kong/dollar	7.7345	7.7431	7.7467	7.7575	7.7603	7.7638	7.7665	7.7696	7.7718
14 India/rupee	35.51	36.36	41.36	43.21	43.36	43.50	43.60	43.55	43.46
15 Ireland/pound[2]	159.95	151.63	142.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
16 Italy/lira	1,542.76	1,703.81	1,736.85	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
17 Japan/yen	108.78	121.06	130.99	120.72	119.33	113.23	106.88	105.97	104.65
18 Malaysia/ringgit	2.5154	2.8173	3.9254	3.8000	3.8000	3.8000	3.8000	3.8000	3.8000
19 Mexico/peso	7.600	7.918	9.152	9.515	9.370	9.398	9.341	9.575	9.416
20 Netherlands/guilder	1.6863	1.9525	1.9837	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
21 New Zealand/dollar[2]	68.77	66.25	53.61	53.25	52.61	52.59	52.30	51.42	51.22
22 Norway/krone	6.4594	7.0857	7.5521	7.8749	7.9029	7.8036	7.8361	7.7402	7.9367
23 Portugal/escudo	154.28	175.44	180.25	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
24 Singapore/dollar	1.4100	1.4857	1.6722	1.7107	1.6958	1.6787	1.6965	1.6757	1.6699
25 South Africa/rand	4.3011	4.6072	5.5417	6.0880	6.1182	6.1302	6.0563	6.1029	6.1424
26 South Korea/won	805.00	947.65	1,400.40	1,168.91	1,189.10	1,198.31	1,201.00	1,205.29	1,176.98
27 Spain/peseta	126.68	146.53	149.41	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
28 Sri Lanka/rupee	55.289	59.026	65.006	71.211	71.912	71.868	71.942	71.747	72.040
29 Sweden/krona	6.7082	7.6446	7.9522	8.5065	8.4431	8.2589	8.2264	8.1492	8.3586
30 Switzerland/franc	1.2361	1.4514	1.4506	1.5374	1.5474	1.5093	1.5262	1.4896	1.5543
31 Taiwan/dollar	27.468	28.775	33.547	32.525	32.338	32.076	31.848	31.828	31.794
32 Thailand/baht	25.359	31.072	41.262	36.926	37.143	38.060	40.060	39.416	38.749
33 United Kingdom/pound[2]	156.07	163.76	165.73	159.50	157.51	160.58	162.47	165.72	162.05
34 Venezuela/bolivar	417.19	488.39	548.39	603.29	611.17	615.95	625.41	630.75	634.80
	Indexes[4]								
NOMINAL									
35 Broad (January 1997=100)[5]	97.40	104.44	116.48	117.93	117.97	117.00	116.38	115.88	116.08
36 Major currencies (March 1973=100)[6]	84.60	91.24	95.79	96.07	96.31	94.31	92.92	91.94	92.87
37 Other important trading partners (January 1997=100)[7]	98.26	104.67	126.03	129.03	128.73	129.73	130.60	131.06	129.93
REAL									
38 Broad (March 1973=100)[5]	86.72	91.33r	99.35r	99.61	99.91	99.04	98.49r	97.91r	97.76
39 Major currencies (March 1973=100)[6]	84.95r	92.25r	97.25r	98.61	99.19	97.13r	95.91	94.93r	95.89
40 Other important trading partners (March 1973=100)[7]	94.69	95.87	108.50	107.25	107.18	107.90	108.25r	108.20r	106.46

1. Averages of certified noon buying rates in New York for cable transfers. Data in this table also appear in the Board's G.5 (405) monthly statistical release. For ordering address, see inside front cover.

2. Value in U.S. cents.

3. As of January 1999, the euro is reported in place of the individual euro area currencies. These currency rates can be derived from the euro rate by using the fixed conversion rates (in currencies per euro) as shown below:

Euro equals

13.7603	Austrian schillings	1936.27	Italian lire
40.3399	Belgian francs	40.3399	Luxembourg francs
5.94573	Finnish markkas	2.20371	Netherlands guilders
6.55957	French francs	200.482	Portuguese escudos
1.95583	German marks	166.386	Spanish pesetas
.787564	Irish pounds		

4. The December 1999 Bulletin contains revised index values resulting from the annual revision to the trade weights. For more information on the indexes of the foreign exchange value of the dollar, see *Federal Reserve Bulletin*, vol. 84 (October 1998), pp. 811–18.

5. Weighted average of the foreign exchange value of the U.S. dollar against the currencies of a broad group of U.S. trading partners. The weight for each currency is computed as an average of U.S. bilateral import shares from and export shares to the issuing country and of a measure of the importance to U.S. exporters of that country's trade in third country markets.

6. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.

7. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that do not circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.

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4.31 PRO FORMA FINANCIAL STATEMENTS FOR FEDERAL RESERVE PRICED SERVICES

A. Pro forma balance sheet

Millions of dollars

Item	Sept. 30, 1999		Sept. 30, 1998	
Short-term assets (Note 1)				
Imputed reserve requirement on clearing balances	680.5		655.7	
Investment in marketable securities	6,124.5		5,901.3	
Receivables	70.7		68.6	
Materials and supplies	4.3		4.5	
Prepaid expenses	21.0		17.1	
Items in process of collection	3,532.6		4,169.0	
Total short-term assets		10,433.7		10,816.4
Long-term assets (Note 2)				
Premises	418.8		396.4	
Furniture and equipment	145.7		126.0	
Leases and leasehold improvements	40.9		22.9	
Prepaid pension costs	516.4		415.5	
Total long-term assets		1,121.8		960.9
Total assets		**11,555.5**		**11,777.3**
Short-term liabilities				
Clearing balances and balances arising from early credit of uncollected items	7,076.8		6,146.8	
Deferred-availability items	3,260.9		4,579.2	
Short-term debt	96.0		90.4	
Total short-term liabilities		10,433.7		10,816.4
Long-term liabilities				
Obligations under capital leases	0.0		0.0	
Long-term debt	225.2		190.9	
Postretirement/postemployment benefits obligation	215.9		214.6	
Total long-term liabilities		441.1		405.5
Total liabilities		**10,874.7**		**11,221.9**
Equity		680.7		555.5
Total liabilities and equity (Note 3)		**11,555.5**		**11,777.3**

NOTE. Components may not sum to totals because of rounding. The priced services financial statements consist of these tables and the accompanying notes.

(1) SHORT-TERM ASSETS

The imputed reserve requirement on clearing balances held at Reserve Banks by depository institutions reflects a treatment comparable to that of compensating balances held at correspondent banks by respondent institutions. The reserve requirement imposed on respondent balances must be held as vault cash or as nonearning balances maintained at a Reserve Bank; thus, a portion of priced services clearing balances held with the Federal Reserve is shown as required reserves on the asset side of the balance sheet. The remainder of clearing balances is assumed to be invested in three-month Treasury bills, shown as investment in marketable securities.

Receivables are (1) amounts due the Reserve Banks for priced services and (2) the share of suspense-account and difference-account balances related to priced services.

Materials and supplies are the inventory value of short-term assets.

Prepaid expenses include salary advances and travel advances for priced-service personnel.

Items in process of collection is gross Federal Reserve cash items in process of collection (CIPC) stated on a basis comparable to that of a commercial bank. It reflects adjustments for intra-System items that would otherwise be double-counted on a consolidated Federal Reserve balance sheet; adjustments for items associated with non-priced items, such as those collected for government agencies; and adjustments for items associated with providing fixed availability or credit before items are received and processed. Among the costs to be recovered under the Monetary Control Act is the cost of float, or net CIPC during the period (the difference between gross CIPC and deferred-availability items which is the portion of gross CIPC that involves a financing cost), valued at the federal funds rate.

(2) LONG-TERM ASSETS

Consists of long-term assets used solely in priced services, the priced-services portion of long-term assets shared with nonpriced services, and an estimate of the assets of the Board of Governors used in the development of priced services. Effective Jan. 1, 1987, the Reserve Banks implemented the Financial Accounting Standards Board's Statement of Financial Accounting Standards No. 87, *Employers' Accounting for Pensions* (SFAS 87). Accordingly, the Federal Reserve Banks recognized credits to expenses of $24.9 million in the third quarter of 1999, $32.3 million in the second quarter of 1999, $21.9 million in the first quarter of 1999, $20.4 million in the third quarter of 1998, $28.7 million in the second quarter of 1998, and $16.2 million in the first quarter of 1998, and corresponding increases in this asset account.

(3) LIABILITIES AND EQUITY

Under the matched-book capital structure for assets that are not "self-financing," short-term assets are financed with short-term debt. Long-term assets are financed with long-term debt and equity in a proportion equal to the ratio of long-term debt to equity for the fifty largest bank holding companies, which are used in the model for the private-sector adjustment factor (PSAF). The PSAF consists of the taxes that would have been paid and the return on capital that would have been provided had priced services been furnished by a private-sector firm. Other short-term liabilities include clearing balances maintained at Reserve Banks and deposit balances arising from float. Other long-term liabilities consist of obligations on capital leases.

4.31 PRO FORMA FINANCIAL STATEMENTS FOR FEDERAL RESERVE PRICED SERVICES

B. Pro forma income statement

Millions of dollars

Item	Quarter ending Sept. 30, 1999		Quarter ending Sept. 30, 1998	
Revenue from services provided to depository institutions (Note 4)		210.9		205.5
Operating expenses (Note 5)		173.6		167.0
Income from operations		37.3		38.4
Inputed costs (Note 6)				
Interest on float	1.0		1.8	
Interest on debt	4.6		4.3	
Sales taxes	2.3		2.4	
FDIC insurance	0.9	8.8	0.7	9.1
Income from operations after imputed costs		28.5		29.3
Other income and expenses (Note 7)				
Investment income on clearing balances	84.6		89.8	
Earnings credits	(79.2)	5.4	(85.6)	4.2
Income before income taxes		33.9		33.5
Inputed income taxes (Note 8)		10.9		10.7
Net income		**23.1**		**22.7**
MEMO				
Targeted return on equity (Note 9)		14.3		17.1
	Nine months ending Sept. 30, 1999		Nine months ending Sept. 30, 1998	
Revenue from services provided to depository institutions (Note 4)		619.3		602.5
Operating expenses (Note 5)		508.5		483.9
Income from operations		110.8		118.6
Imputed costs (Note 6)				
Interest on float	6.9		11.1	
Interest on debt	13.8		12.8	
Sales taxes	6.9		6.1	
FDIC insurance	2.5	30.2	0.7	30.7
Income from operations after imputed costs		80.7		88.0
Other income and expenses (Note 7)				
Investment income on clearing balances	243.8		271.3	
Earnings credits	(220.2)	23.6	(251.2)	20.2
Income before income taxes		104.3		108.1
Imputed income taxes (Note 8)		33.4		34.7
Net income		**70.9**		**73.4**
MEMO				
Targeted return on equity (Note 9)		45.8		49.9

NOTE. Components may not sum to totals because of rounding. The priced services financial statements consist of these tables and the accompanying notes.

(4) REVENUE

Revenue represents charges to depository institutions for priced services and is realized from each institution through one of two methods: direct charges to an institution's account or charges against its accumulated earnings credits.

(5) OPERATING EXPENSES

Operating expenses consist of the direct, indirect, and other general administrative expenses of the Reserve Banks for priced services plus the expenses for staff members of the Board of Governors working directly on the development of priced services. The expenses for Board staff members were $.85 million in the first three quarters of 1999 and $0.7 million in the first three quarters of 1998. The credit to expenses under SFAS 87 (see note 2) is reflected in operating expenses.

(6) IMPUTED COSTS

Imputed costs consist of interest on float, interest on debt, sales taxes, and the FDIC assessment. Interest on float is derived from the value of float to be recovered, either explicitly or through per-item fees, during the period. Float costs include costs for checks, book-entry securities, noncash collection, ACH, and funds transfers.

Interest is imputed on the debt assumed necessary to finance priced-service assets. The sales taxes and FDIC assessment that the Federal Reserve would have paid had it been a private-sector firm are among the components of the PSAF (see note 3).

Float costs are based on the actual float incurred for each priced service, multiplied by the appropriate federal funds rate. Other imputed costs are allocated among priced services according to the ratio of operating expenses less shipping expenses for each service to the total expenses for all services less the total shipping expenses for all services.

The following list shows the daily average recovery of float (before converting to float costs) by the Reserve Banks for the third quarter of 1999 and 1998 in millions of dollars:

	1999	1998
Total float	437.1	386.2
Unrecovered float	(148.5)	19.7
Float subject to recovery	585.6	366.5
Sources of float recovery		
Income on clearing balances	44.3	36.6
As-of adjustments	352.0	240.2
Direct charges	100.2	113.7
Per-item fees	89.0	(23.9)

Unrecovered float includes float generated by services to government agencies and by other central bank services. Float recovered through income on clearing balances is the result of the increase in investable clearing balances; the increase is produced by a deduction for float for cash items in process of collection, which reduces imputed reserve requirements. The income on clearing balances reduces the float to be recovered through other means. As-of adjustments are memorandum adjustments to an institution's reserve or clearing position to recover float incurred by the institution. Direct charges are billed to the institution for float incurred when an institution chooses to close on a normal business day and for float incurred on interterritory check transportation. Float recovered through direct charges is valued at cost using the federal funds rate and charged directly to an institution's account. Float recovered through per-item fees is valued at the federal funds rate and has been added to the cost base subject to recovery in the second quarters of 1999 and 1998.

(7) OTHER INCOME AND EXPENSES

Consists of imputed investment income on clearing balances and the actual cost of earnings credits. Investment income on clearing balances represents the average coupon-equivalent yield on three-month Treasury bills applied to the *total* clearing balance maintained, adjusted for the effect of reserve requirements on clearing balances. Expenses for earnings credits granted to depository institutions on their clearing balances are derived by applying the average federal funds rate to the *required* portion of the clearing balances, adjusted for the net effect of reserve requirements on clearing balances.

(8) INCOME TAXES

Imputed income taxes are calculated at the effective tax rate derived from the PSAF model (see note 3).

(9) RETURN ON EQUITY

Represents the after-tax rate of return on equity that the Federal Reserve would have earned had it been a private business firm, as derived from the PSAF model (see note 3). This amount is adjusted to reflect the recovery of automation consolidation costs of $.3 million for the third quarter of 1999, $.2 million for the second quarter of 1999, $.4 million for first quarter of 1999, $4.0 million for the third quarter of 1998, $4.1 million in the second quarter of 1998, and $2.6 million for the first quarter of 1998. The Reserve Banks plan to recover these amounts, along with a finance charge, by the end of 1999.

Index to Statistical Tables

References are to pages A3–A65 although the prefix "A" is omitted in this index

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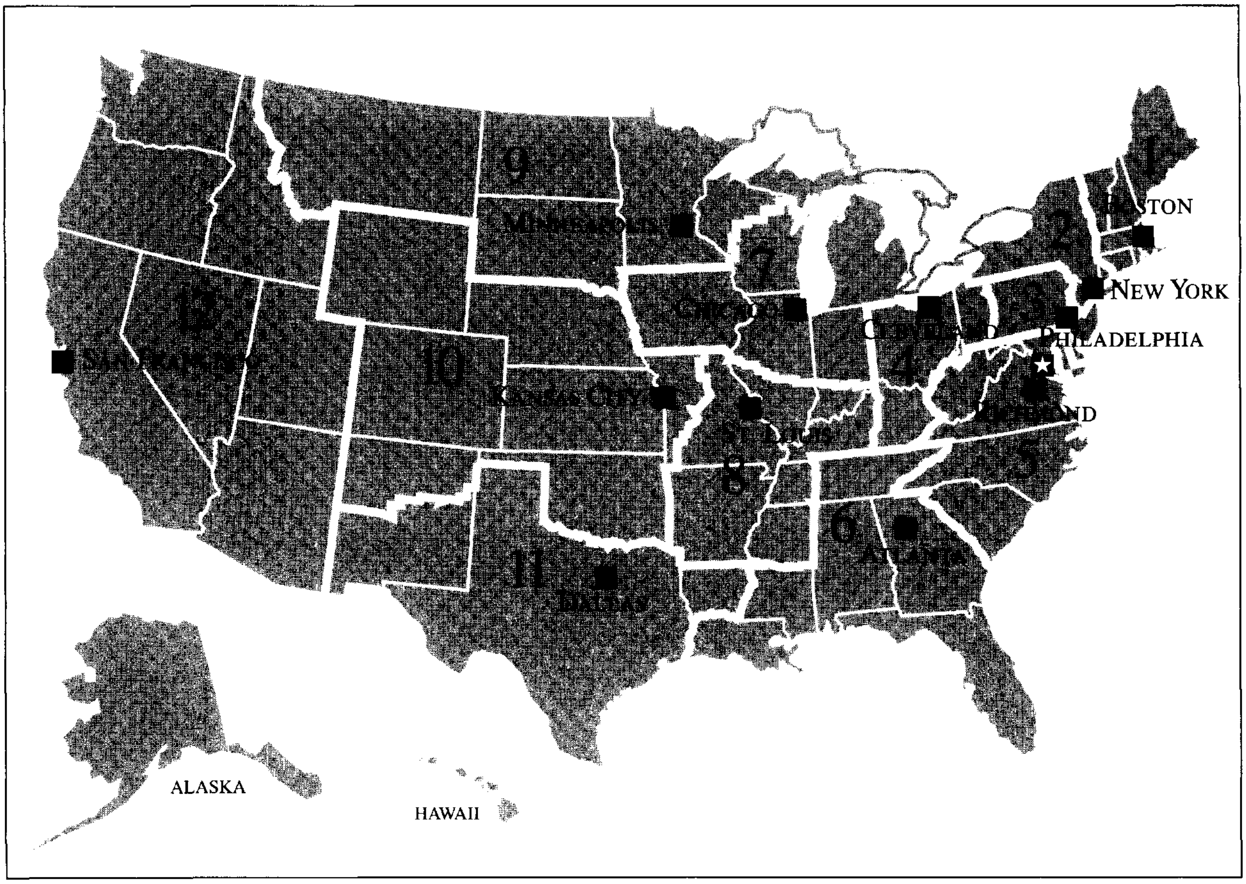


LEGEND

Both pages

■ Federal Reserve Bank city

☒ Board of Governors of the Federal Reserve System, Washington, D.C.

Facing page

• Federal Reserve Branch city

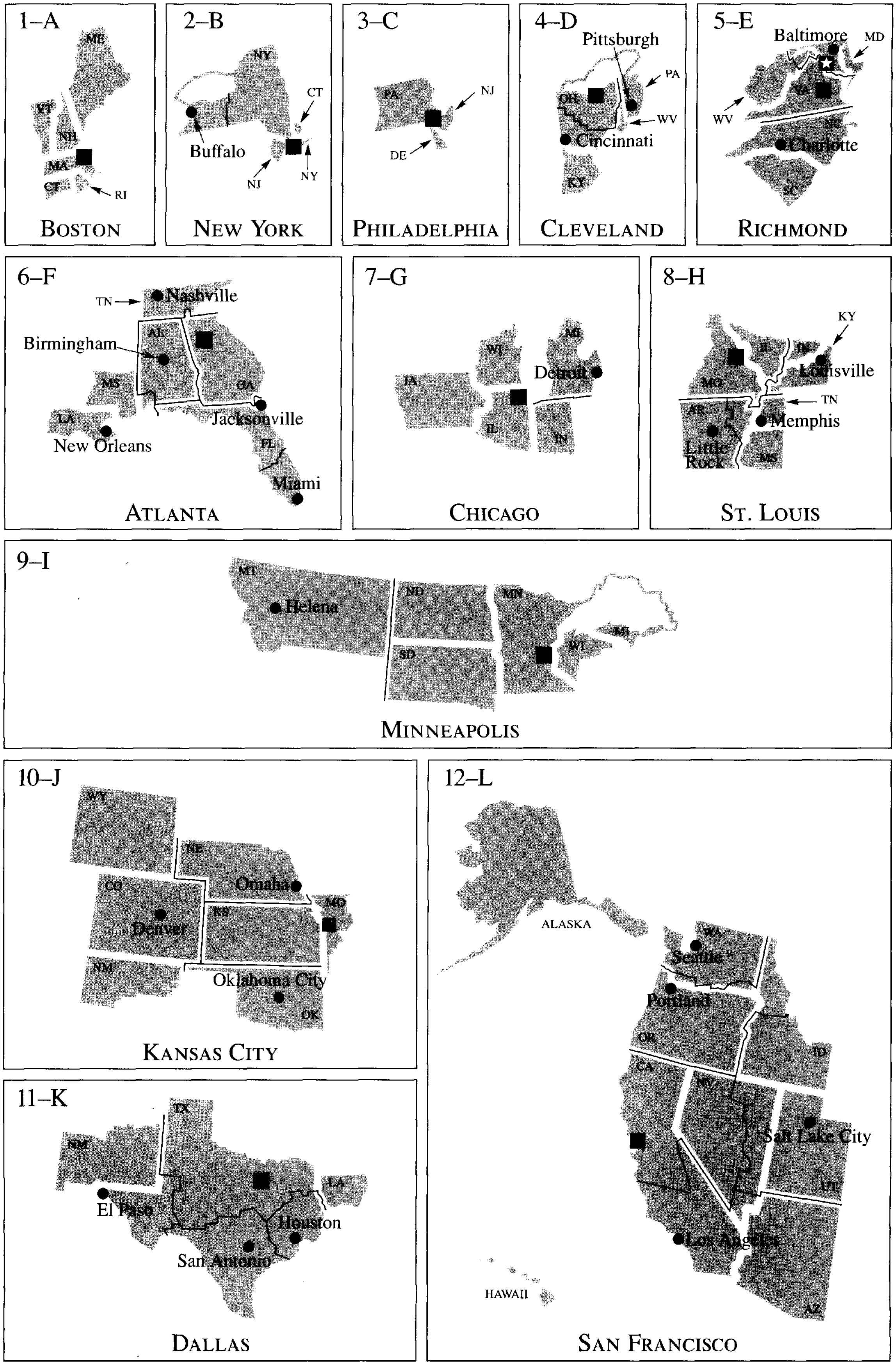
— Branch boundary

NOTE

The Federal Reserve officially identifies Districts by number and Reserve Bank city (shown on both pages) and by letter (shown on the facing page).

In the 12th District, the Seattle Branch serves Alaska, and the San Francisco Bank serves Hawaii.

The System serves commonwealths and territories as follows: the New York Bank serves the Commonwealth of Puerto Rico and the U.S. Virgin Islands; the San Francisco Bank serves American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. The Board of Governors revised the branch boundaries of the System most recently in February 1996.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